TWENTY-FOURTH

BIENNIAL REPORT

OF THE

PUBLIC SERVICE COMMISSION

OF KENTUCKY

JULY 1, 1979 THRU JUNE 30, 1981

FRANKFORT, KENTUCKY

COMMONWEALTH OF KENTUCKY
PUBLIC SERVICE COMMISSION
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LETTER OF TRANSMITTAL

March 31, 1982

Honorable John Y. Brown, Jr.
Governor
Commonwealth of Kentucky
Frankfort, Kentucky 40601

Dear Governor Brown:

We have the honor to submit the Twenty-fourth Biennial Report of the Public Service Commission of Kentucky covering the period beginning July 1, 1979, and ending June 30, 1981.

Yours very truly,

PUBLIC SERVICE COMMISSION

Marlin M. Volz, Chairman
Katherine Randall, Vice Chairman
Dennis P. Carrigan, Commissioner

Richard D. Heman, Jr.
Acting Executive Director and Secretary

THE PUBLIC SERVICE COMMISSION OF KENTUCKY

Introduction

The Public Service Commission of Kentucky ("PSC") is a statutory administrative body with quasi-legislative and quasi-judicial functions. It was created by Chapter 145 of the Acts of the 1934 General Assembly to regulate certain utilities providing service in Kentucky, and has been amended several times. Currently, the PSC regulates the intrastate rates and services of investor-owned electric, natural gas, telephone, water and sewage utilities, customer-owned electric and telephone cooperatives and water districts and associations, and certain aspects of pipelines.

The PSC exercises its regulatory authority through written orders, following formal adjudicatory and rulemaking proceedings pursuant to Chapter 273 of the Kentucky Revised Statutes ("KRS"). Administrative regulations promulgated by the PSC appear in Chapter 807 of the Kentucky Administrative Regulations ("KAR").

This biennial report provides a brief history of the PSC, the current organizational structure, and by regulated industry its activities, accomplishments and challenges of the coming decade.

Organization of the Kentucky Public Service Commission

Prior to 1972 the PSC reported directly to the Governor and the General Assembly. In 1972 the Governor placed the PSC under the Public Protection and Regulation Cabinet (formerly the Consumer Protection and Regulation Cabinet). The current functional organizational structure of the PSC is shown in Chart 1. The chairman is the chief executive officer. The executive director is the chief administrative officer and provides direction and coordination of the day-to-day operations of the PSC staff.

Commissioners

There are three full-time commissioners, appointed for staggered 4-year terms. They are Chairman Marlin M. Volz, Vice Chairman Katherine Randall and Commissioner Dennis P. Carrigan. They review and decide cases filed with the PSC as well as make all other pertinent decisions affecting the PSC. In making these decisions, they conduct hearings and public meetings and review testimony and exhibits filed by the utilities, consumers and intervenors. They also participate in meetings, conferences and seminars dealing with regulation in various forms which are conducted by other

states, private firms and the National Association of Regulatory Utility Commissioners.

The open public hearing is a traditional and statutory first step for the exercise of many of the functions of the PSC. It is commenced by the filing of an application, a formal complaint, or upon the motion of the commission itself when it deems it necessary, to develop an evidentiary foundation for the issuance of a PSC order. The hearings may involve new rates, service complaints, utility operating procedures, or a myriad of other matters coming within the regulatory jurisdiction of the PSC. All three commissioners, any one of them, or a hearing examiner designated by the PSC may preside over the hearing, which is recorded by a court reporter and transcribed for the PSC record.

The number of hearings held by the PSC has been increasing at a rate of approximately 10 percent per biennium, notwithstanding the use of administrative law procedures to cut down the need for hearings.

Chart 2 shows the organization of the office of the commissioners.

The Office of Secretary

The secretary of the PSC receives formal filings, schedules hearings, attests to every formal and administrative

order issued and advises the commissioners on administrative and rate-making policy. Chart 3 shows the staff structure of this office.

The Office of Executive Director

The duties of the executive director are to provide staff direction and coordination for program implementation. The performance of these duties requires continuous evaluation of PSC personnel needs, staff performance and operating procedures. These evaluations insure that the PSC's responsibilities are met efficiently and that regulation is provided for the utility industry and its customers at the lowest reasonable cost.

The Office of General Counsel

The office of general counsel has three principal functions: (1) to examine witnesses in PSC hearings; (2) to represent the PSC, both prosecuting and defending, in the courts; and (3) to provide legal assistance and advice to the PSC and staff, including the drafting and revision of regulations, as well as advising the commissioners of the impact of federal and state legislation and the rules and regulations adopted by other federal and state agencies. Chart 4 shows the staff structure of this office.

Division of Utility Engineering Services

The division of engineering has a director and four sections: communications, electric, gas, and water and sewer. The day-to-day operations of each section are managed by a chief engineer who reports to and receives work assignments directly from the director. The staff members assigned to each section report to and receive work assignments directly from the chief engineer. Chart 6 shows the staff structure of this division.

The staff of this division analyzes and evaluates requests for certificates of construction, power plant performance in fuel clause proceedings, requests for changes in depreciation rates and utilities' load management programs. It also investigates and reports on service complaints, accidents or dangerous conditions involving service, emergency plans to meet service interruptions, requests for approval of gas restoration projects, and boundary disputes. The impact of federal and state legislation, requests for extended area telephone service, compliance of each utility's service rules with the PSC's regulations, and utilities' meter testing equipment are also part of the division's responsibilities. It is also responsible for the implementation of the Residential Conservation Service Program. Another important function of this division is to work with the PSC attorneys in preparing the line of questioning for hearings.

Division of Rates and Tariffs

This division is composed of four sections: revenue requirements, tariffs, statistical research, and secretarial. The revenue requirements and tariff sections each have two subsections. The day-to-day operations of the subsections are managed by supervisors who report to and receive their work assignments directly from the assistant director. The staff members assigned to each subsection report to and receive work assignments directly from the supervisor. Chart 7 shows the staff structure of this division.

The staff in the revenue requirements section performs comprehensive and complex accounting and financial analyses and provides the commissioners with expert advice on requests for rate increases, financing, and acquisitions through purchase or merger. They develop report forms, audit programs and compile statistical data to monitor the utilities' financial condition.

The tariff section evaluates the reasonableness of present and proposed rate structures, purchased power adjustments, fuel costs included in the fuel adjustment clause and rates filed under the purchased water adjustment clause, and develops comparisons of rates charged by utilities in Kentucky.

An important function of both the revenue requirements section and the tariff section is to work with the PSC attorneys in preparing the line of questioning for hearings.

The staff in the statistical research section compiles statistical data and maintains the research library, the official copy of the tariff of each utility and the files for the division of rates and tariffs and the division of engineering.

The secretarial section provides support services to the division of engineering and the division of rates and tariffs. This includes typing, mail distribution, dictation and other assistance in the day-to-day activities of these two divisions.

Division of Analysis, Research and Statistics

This division was established to assist the PSC in analyzing complex issues arising from the National Energy Act of 1978. The PSC and the regulated electric utilities were required to consider certain ratemaking standards contained in the act. During this biennium, this division has evaluated the economic impact of rates based on embedded and marginal cost studies filed by utilities covered by the Public Utility Regulatory Policies Act ("PURPA"). This staff advises the PSC on concepts such as declining block, seasonal, time-of-day and interruptible rates as well as assisting in formulating policy on cogeneration of electricity and the rates to be paid by utilities for energy purchased from small power producers. In addition, this

division will coordinate the economic research and analysis of load management programs conducted through a statewide load management committee. Chart 5 shows the staff structure of this division.

Division of Administrative Services

This division provides administrative support services for the PSC. This includes fiscal management support, maintaining the books and records for each division, purchasing, inventory control and budget and payroll preparation. The division is responsible for all personnel services and maintenance of the PSC's offices.

Chart 1

ORGANIZATIONAL CHART

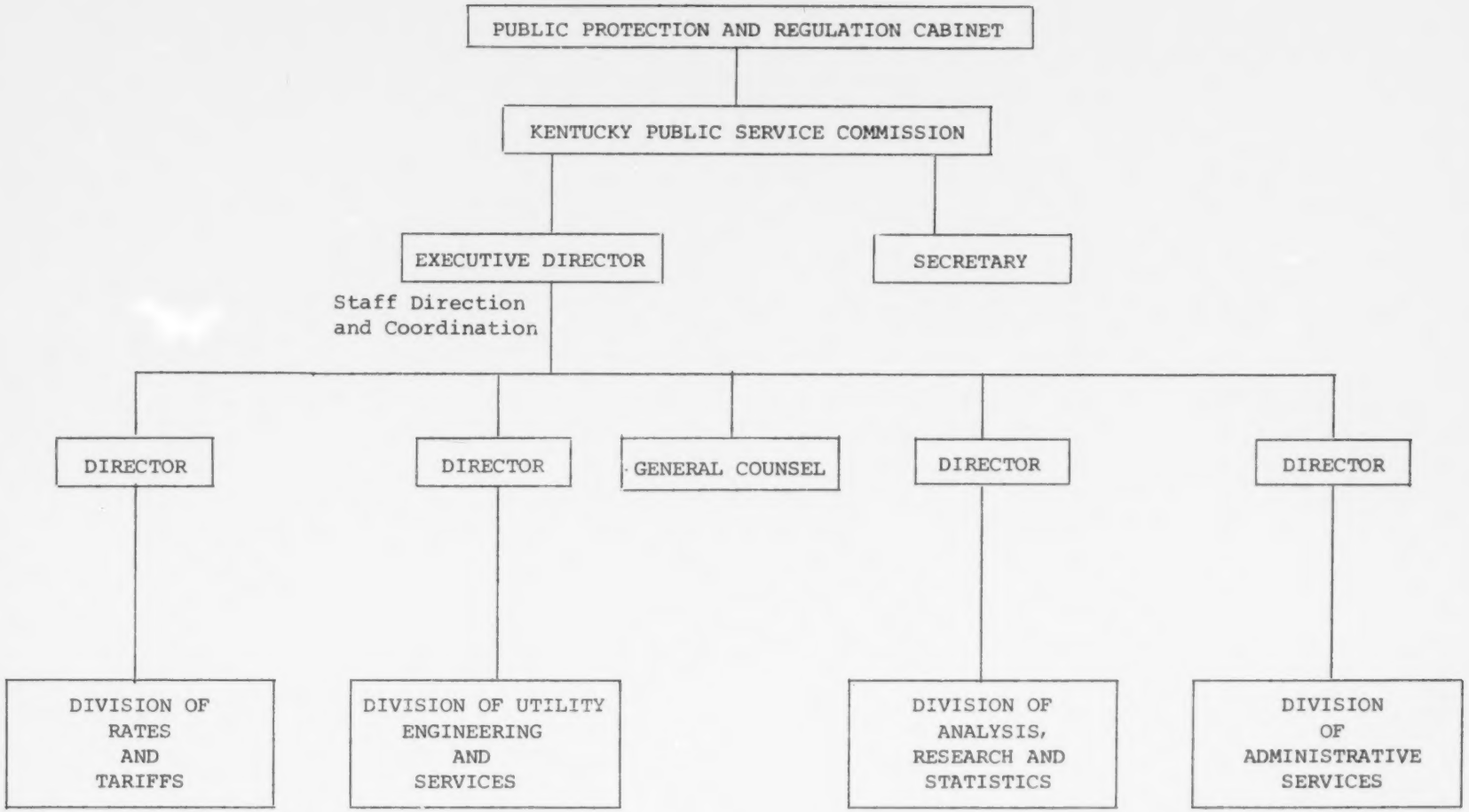


Chart 2

KENTUCKY PUBLIC SERVICE COMMISSION

OFFICE OF COMMISSIONERS

Organizational Chart

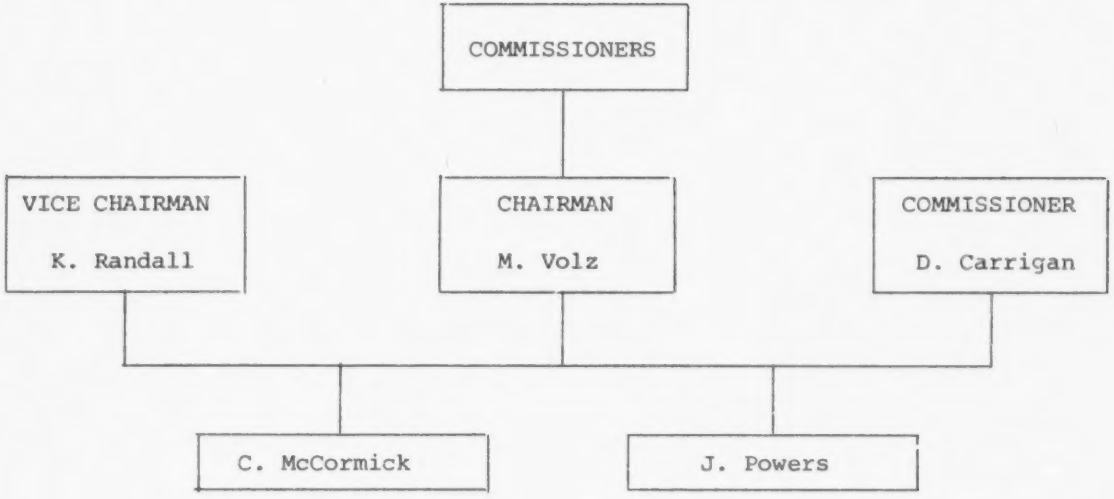


Chart 3

KENTUCKY PUBLIC SERVICE COMMISSION

OFFICE OF SECRETARY

Organizational Chart

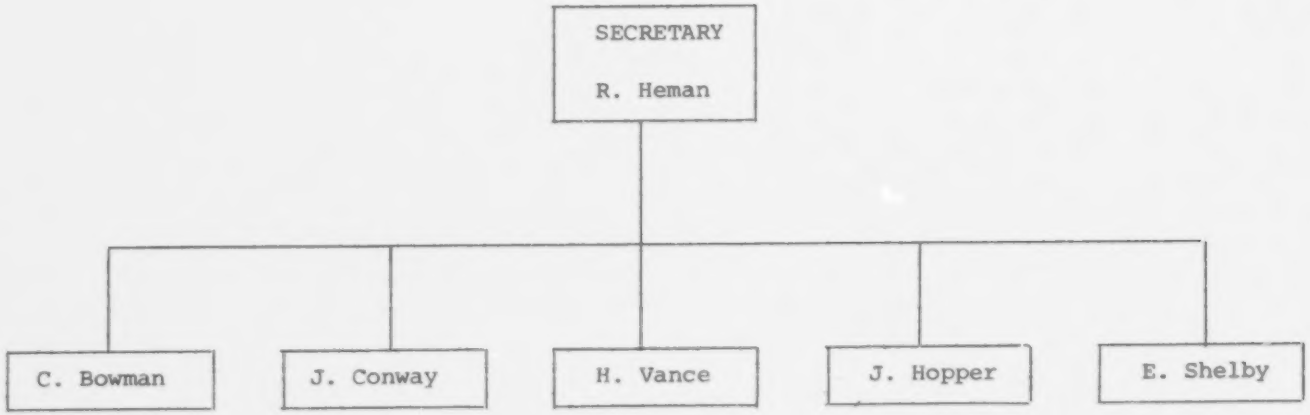


Chart 4

KENTUCKY PUBLIC SERVICE COMMISSION

Office of General Counsel

Organizational Chart

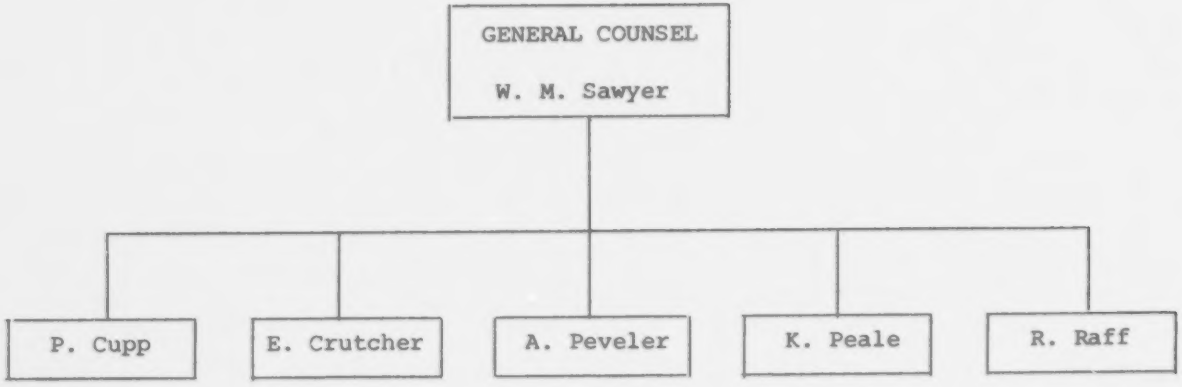
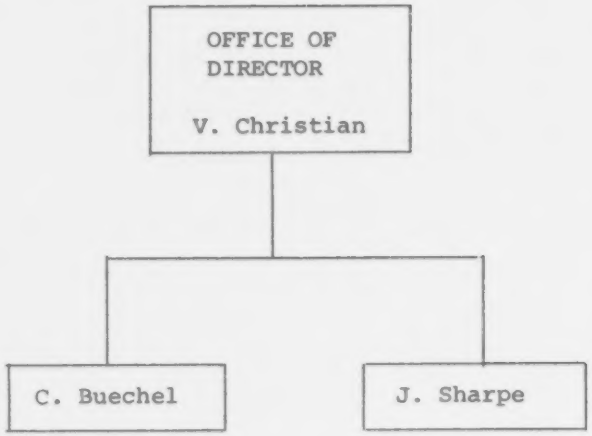


Chart 5

KENTUCKY PUBLIC SERVICE COMMISSION

Division of Analysis, Research and Statistics

Organizational Chart

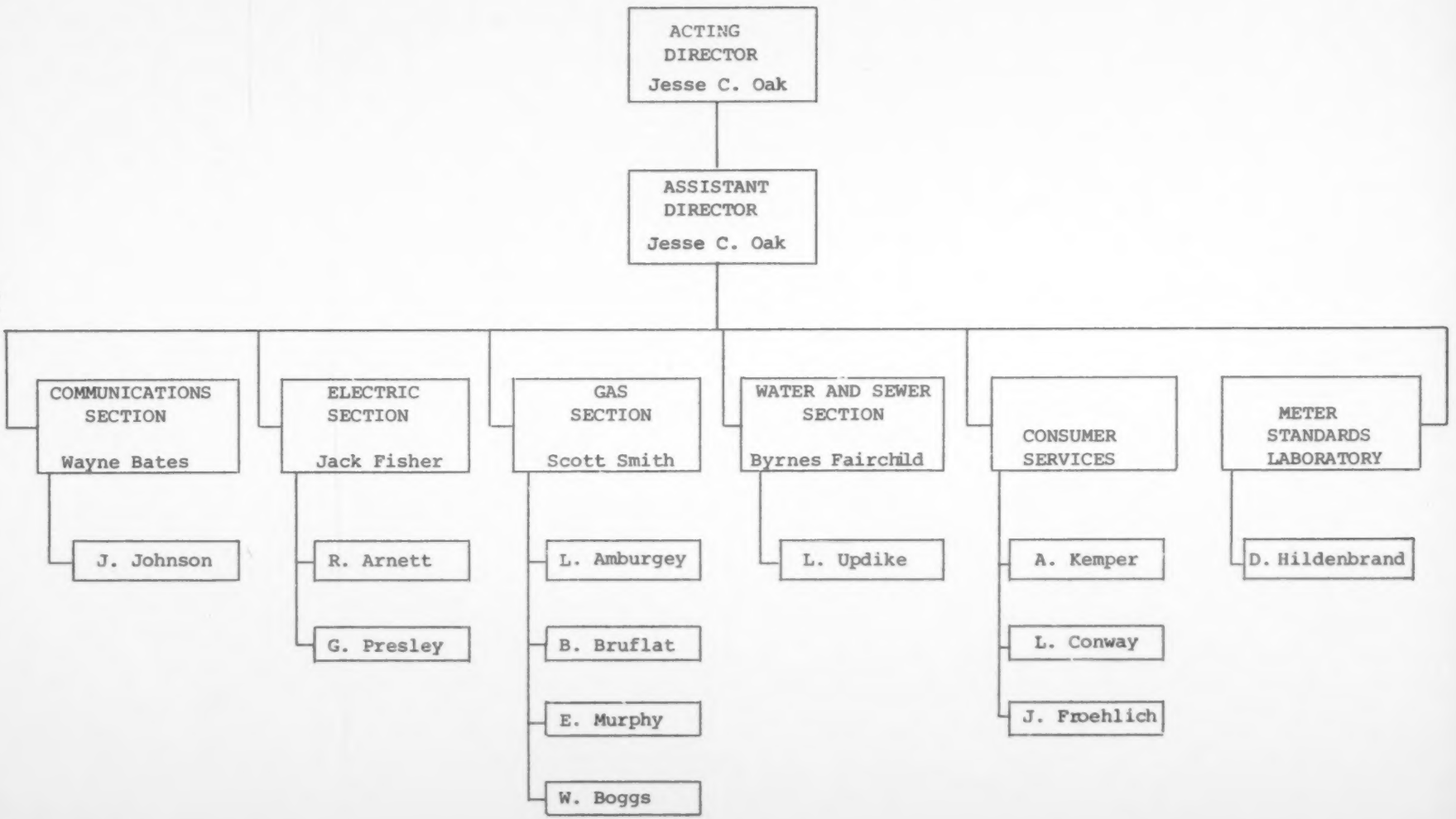


KENTUCKY PUBLIC SERVICE COMMISSION

Chart 6

Division of Utility Engineering and Services

Organizational Chart

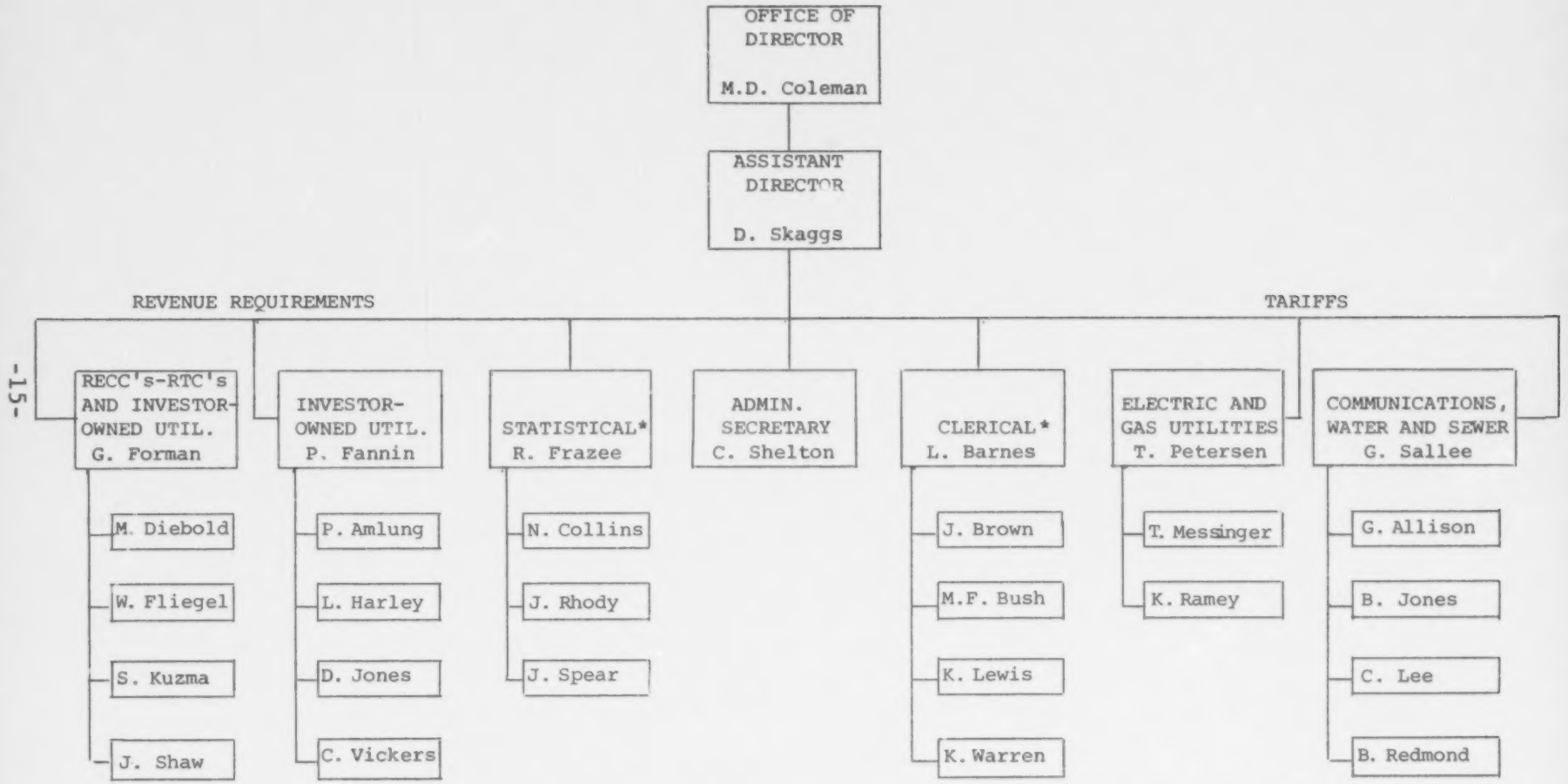


KENTUCKY PUBLIC SERVICE COMMISSION

Chart 7

Division of Rates and Tariffs

Organizational Chart



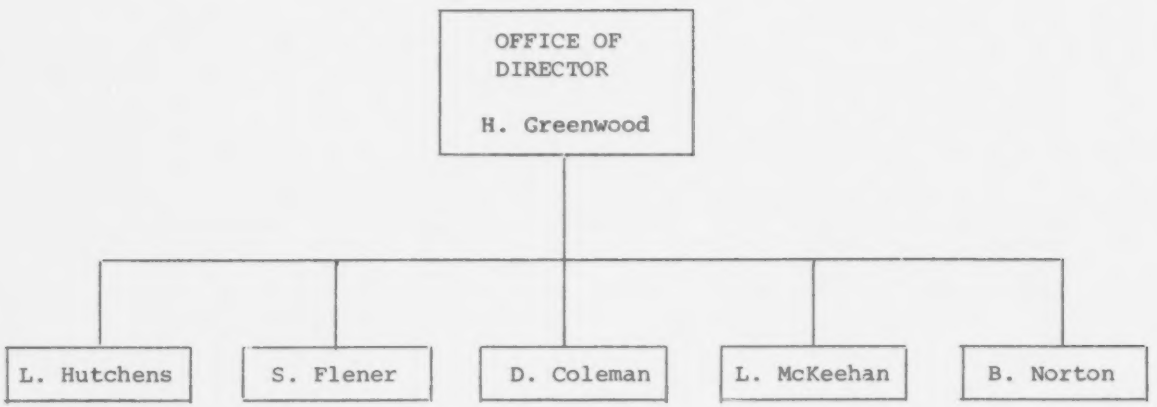
*These two sections (Statistical and Clerical) also work under the Division of Utility Engineering and Services

Chart 8

KENTUCKY PUBLIC SERVICE COMMISSION

Division of Administrative Services

Organizational Chart



Brief History of the Public Service Commission of Kentucky

The PSC was created by Chapter 145, Acts of the 1934 Kentucky General Assembly. Its jurisdiction extended to privately- and municipally-owned water, electric, gas, telephone and street-railway utilities. Its operations were funded by assessment of the regulated utilities with any surplus being carried forward to the next year. By Chapter 92, Acts of the General Assembly, 1936, municipally-owned utilities were excluded from the PSC's jurisdiction except for operations outside their corporate boundaries; then in 1950 the General Assembly removed street-railways from the jurisdiction of the PSC to the Department of Motor Transportation. In 1964 water districts came under the PSC's jurisdiction and in 1975 the PSC began regulating sewer utilities.

Much of the PSC's early work concerned adopting systems of accounts for the regulated utilities and obtaining annual reports from them. Another top priority was obtaining competent professional staff.

Through its early efforts, the PSC succeeded in simplifying the utilities' rate schedules and eliminating unreasonable rate differentials. Demand and usage were constantly rising throughout this time. This resulted in lower costs

per unit, thus effecting a continual reduction in rates for consumers.

The constitutionality of the Public Service Commission Act was upheld by the Court of Appeals in Southern Bell Telephone & Telegraph v. City of Louisville, 265 Ky. 286, 96 S.W.2d 695 (1936), and Smith, Clerk v. Southern Bell Telephone & Telegraph, 268 Ky. 421, 104 S.W.2d 961 (1937). Its authority to issue certificates of convenience and necessity was confirmed by the Court of Appeals in City of Vanceburg v. Plummer, 275 Ky. 713, 122 S.W.2d 772 (1938).

The early PSC developed procedures to inventory original cost of plant and to make statistical studies, established continuing property records, decided that original cost should be used to ascertain the utilities' rate base, began to perform original cost studies and to develop and implement a uniform system of accounts. It also encouraged larger utilities to purchase and operate smaller, isolated systems that could not provide adequate service at reasonable rates. Thus, within its first 10 to 15 years, the PSC had established methods to be followed in regulating the utilities.

The PSC worked with the Rural Electrification Administration ("REA") to promote expansion of electric service into rural Kentucky. In 1937, the General Assembly passed the Rural Electric Cooperative Corporation Act, giving the

PSC jurisdiction over the rural electric cooperative utilities. In its 1937 annual report, REA made the following comment on the PSC's efforts to promote this movement: "The PSC did not limit its efforts only to this movement but gave active encouragement to privately-owned utilities to extend lines into the rural areas whenever it was practical or feasible."

During the fourth biennium (1940-1941), the PSC, at the request of Governor Johnson, studied the Tennessee Valley Authority's impact on the electric rates, economics and public relations of Kentuckians in the Tennessee Valley area.

During World War II, shortages of materials limited the expansion of utility services. However, by the close of the seventh biennium (1946-1947), the demand for services had reached an all-time high, taxing existing capacity and causing unsatisfactory service. The PSC was active in encouraging long-range plans to meet this unprecedented demand for service.

By the eighth biennium (1948-1949), war-time natural gas shortages had abated, and the PSC estimated 15,000 new customers would receive space heating service during the 1949-50 heating season. Although there were still supply problems during severe winters. gas companies served more customers each year.

The PSC also encouraged expansion of telephone service into rural areas where only 26 percent of the farms had telephones. In 1950 the General Assembly enacted the Rural Telephone Cooperative Act which provided means for rural telephone cooperatives to organize along lines similar to rural electric cooperatives and placed them under PSC jurisdiction. With the establishment of telephone cooperatives, the number receiving telephone service began to rise steadily.

The PSC continued to encourage expansion of electric service. In 1951 it approved the formation of East Kentucky Rural Electric Cooperative by the distribution cooperatives to generate and transmit power for distribution by its 18 member cooperatives. By this time, about 76 percent of the farms in Kentucky were receiving electric service.

During its formative years, the PSC emphasized growth: to see that more Kentuckians received adequate utility service at reasonable rates. However, by the twelfth biennium (1956-1957), it concentrated more on maintaining a healthy atmosphere for utilities without losing sight of the fact that rates charged must be just and reasonable. It believed such an atmosphere would result in good utility service and would be an inducement for industrial growth and economic and social well-being.

During the fourteenth biennium (1960-1961), the PSC began to plan for a meter standards laboratory in Lexington.

The lab formulates standards and calibrates meters to insure uniform measurement of service and began operating in the spring of 1965. It was one of the first in the country to be operated by a commission.

A complete revision of the PSC's rules and regulations began in 1966. New rules and regulations for natural gas pipeline safety and employee safety were proposed. Those for telephone companies were revised. The General Assembly authorized the PSC to certify service areas of electric utilities. The PSC was now required to hold preliminary hearings prior to approval of water associations and was authorized to initiate feasibility studies to determine the advisability of water district and association mergers. The PSC was designated to administer the Occupational Safety and Health Act as it related to utilities and their employees. Utilities now had to obtain a certificate of environmental compatibility prior to construction of any generating facility and approval of the route planned for transmission lines in excess of 400 kilovolts.

During the eighteenth biennium (1968-1969), although rate reductions were still being effected for privately-owned utilities, increases became necessary for the rural electric cooperatives, water utilities and Western Union Telegraph Company. By the nineteenth biennium (1970-1971), the days of declining costs were past. During this biennium

blackouts and brownouts in other states received national attention, the focus was shifting from coal-fired to atomic generation, and nationwide shortages of oil and natural gas were recognized for the first time.

In fact, the 1970s were a time of dramatic social and economic change throughout the world. The effects of many of these changes are still being felt by both utilities and consumers.

The 1973 Arab oil embargo and the consequent growth in oil prices due to the influence of OPEC caused energy prices to soar. Increased fuel costs and double-digit inflation, later to be joined by record-high interest rates, caused a quantum jump in utilities' operating costs. These high costs, which are evident today, brought on dramatic rate increases.

The workload of the PSC increased in step with the new reality faced by Kentucky's utilities. The PSC struggled to find new ways to insure that service could be provided at rates that were fair to consumers and the utilities.

During the next biennium (1972-1973), the PSC established purchased gas adjustment ("PGA") clauses to "pass through" increases in the wholesale price of gas. Limitation of gas supply was a major problem at this time. To ameliorate this condition the PSC ordered the gas companies to start conservation education campaigns and end promotional

advertising programs. The number of rate cases filed and increases allowed began to climb.

In 1972 the PSC was expanded from three to five members by the General Assembly. In 1976 the position of executive director was created, and the PSC was provided with a full-time legal staff.

During the twenty-second biennium (1976-1977), the PSC initiated several policy changes. Flat sewer rates were ordered rather than rates based on water usage, depreciation on contributed property was disallowed and the operating ratio was used to determine revenue requirements. On a case-by-case basis the PSC began to flatten electric rate structures.

In 1978 the General Assembly enacted legislation to replace the five-member PSC with an Energy Regulatory Commission ("ERC") and a Utility Regulatory Commission ("URC"), each with three members, served by one professional staff.

During the twenty-third biennium (1978-1979), the ERC promulgated regulations requiring a uniform fuel adjustment clause for electric utilities. Proceedings were begun to comply with PURPA. The Natural Gas Policy Act, allowing partial deregulation of natural gas prices at the well-head and providing for continued escalation of the well-head price, resulted in 266 PGA orders.

Governor John Y. Brown, Jr., by executive order, consolidated the ERC and URC into the PSC during the twenty-fourth biennium (1979-1981), the period covered by this report. The move to the three full-time member body has improved efficiency and cut operating costs. During the period, the PSC conducted 730 hearings on such subjects as rates, service and securities. A more detailed explanation of the PSC's work during the biennium follows.

The Electric Utility Industry

Investor-Owned Electrics

The PSC regulates nine investor-owned electric utilities. Three generate power for resale interstate and are therefore also subject to the jurisdiction of the Federal Energy Regulatory Commission ("FERC").

These utilities continued to grow during this biennium. The number of residential customers at December 31, 1978, was 832,824 compared to 861,318 customers at December 31, 1980. The average monthly bill increased from $28.19 in 1978 to $34.03 in 1980. Gross plant per customer increased from $2,409 per customer in 1978 to $2,588 in 1980. Fuel cost per KWH increased from 1.28 cents in 1978 to 1.35 cents in 1980. The average annual residential usage increased from 9,779 KWH in 1978 to 10,306 KWH in 1980.

Chart E-1 is a graphic representation of the expenses covered by each dollar of revenue collected from customers during the 5-year period ending December 31, 1980. During 1980 a majority of each revenue dollar went to cover the cost of fuel, purchased power, and other operating expenses, which includes the cost of wages, fringe benefits and materials. As depicted by this chart, the amount of each dollar

of revenue required for other operating expenses increased significantly in 1979 and 1980. This can be attributed primarily to the increase in wages, fringe benefits and materials cost and reflects the inflation experienced by the industry.

It has been necessary to grant rate increases to some of the investor-owned utilities during the biennium. Chart E-15 shows that these utilities requested rate increases of $160,616,417 and that the PSC granted $108,343,948. However, Charts E-3 through E-14 show that as of January 1981, the rates paid by Kentuckians for residential, commercial and industrial service were among the lowest in the nation. Kentucky's standing is more favorable than the charts show because five states with lower rates have significant hydro power, and one state is served by TVA.

Rural Electric Cooperative Corporations ("RECCs")

The PSC has jurisdiction over the rates and service of 22 distribution and 2 generating RECCs, and the service, rules and regulations of 5 RECCs that purchase power from TVA. The PSC does not have jurisdiction over the rates of the RECCs that purchase power from TVA.

The RECCs have continued to grow during the biennium. Gross investment in utility plant increased from $1,934 per customer at December 31, 1978, to $2,520 in 1980. The

average number of customers served increased from 426,590 to 442,171 during this period. Average annual residential KWH usage was 12,089 in 1977, 11,613 in 1978 and 11,900 in 1980. Average residential monthly bills increased from $32.46 in 1978 to $40.38 in 1980. As shown in Chart E-16, the PSC approved loans of $2,953,891,000 for construction of new plant during the biennium. The RECCs requested $110,464,653 in rate relief and were granted $95,040,336. Although these increases resulted in higher energy cost, the average monthly bill of $40.38 for 1,000 KWH is well below the January 1981 average U.S. residential bill for 1,000 KWH of $58.13 and would be classified with the group having the lowest rates for this average usage KWH in Chart E-5.

Chart E-2 represents the expenses covered by each dollar of revenue collected from customers for the period December 31, 1976, through December 31, 1980. The largest single items, fuel cost and purchased power expense, consumed $.73 of each dollar of revenue in 1980.

The Industry

The PSC believes that a healthy regulatory environment must be maintained. Such an environment allows a utility the opportunity to earn a return on capital that compensates for risk and insures that Kentuckians pay no more than the industry's cost of service.

During the biennium, the PSC issued 82 final orders for investor-owned electric utilities and 263 orders for RECCs. These orders related to security issues, rate increases, certificates of construction, requests for franchises and fuel adjustment clause proceedings. Charts E-15 and E-16 present in comparative form the caseload of the PSC for the last five bienniums. Most of the growth in the caseload for investor-owned utilities in the current biennium results from an increase in requests for approval of securities. RECC activity has increased significantly because of requests from distribution cooperatives to flow through increases in purchased power cost and from fuel clause proceedings.

The PSC has continued to cooperate with the federal agencies, primarily FERC and REA, whenever necessary.

The PSC has worked diligently with each utility and its customers. During the biennium, 423 customer complaints were received. Most of these complaints were resolved on an informal basis.

The PSC is aggressively pursuing its policy-making role. During the biennium, a regulation establishing a Uniform Fuel Adjustment Clause was approved. Under this regulation, the PSC has established certain data requirements that will allow it to monitor prices paid for fuel and power plant performance. Budget billing plans are a

part of all electric utility tariffs. The PSC continues to issue decisions in rate proceedings within 5 months and 20 days.

The PSC has broken new ground in the area of rate design. Declining rate blocks have been reduced to fewer rate steps and whenever possible, the PSC has reduced the rate to a single charge for each KWH consumed.

The PSC has made a significant effort to meet the requirements of the National Energy Act ("NEA") of 1978. The purpose of the NEA was to slow the country's depletion of nonrenewable sources of energy and to decrease its dependence on foreign oil.

The NEA contained several acts that have a direct impact on the rate-making process. One of them, PURPA, requires state commissions to consider certain regulatory and ratemaking standards. PURPA's stated objectives are to:

Encourage conservation of energy by electric utilities;

Promote efficient use of facilities and resources by electric utilities; and

Promote equitable rates for electric consumers.

Sections 113 and 303 of PURPA require consideration of the following regulatory standards:

Ban master metering for new buildings;

Adopt automatic adjustment or fuel clause that promotes efficient use of fuel by utilities;

Provide information to the consumer with respect to rate schedules;

Develop reasonable procedures for the termination of utility service; and

Prohibit promotional or political advertising at the consumer's expense.

The PSC has conducted public hearings and adopted regulations regarding each of these standards.

Section 111 of PURPA requires consideration of six ratemaking standards:

Fixing of rates based on cost to serve each customer class;

Elimination of declining block rates;

Fixing of rates based on time of use;

Fixing of seasonal rates;

Fixing of interruptible rates; and

Implementation of load management techniques.

The PSC has held hearings on the Section 111 standards and will issue orders adopting those standards which promote the objectives of PURPA.

Section 114 of PURPA requires evidentiary hearings on lifeline rates. These have been held and the PSC's order will be based upon information presented at these hearings.

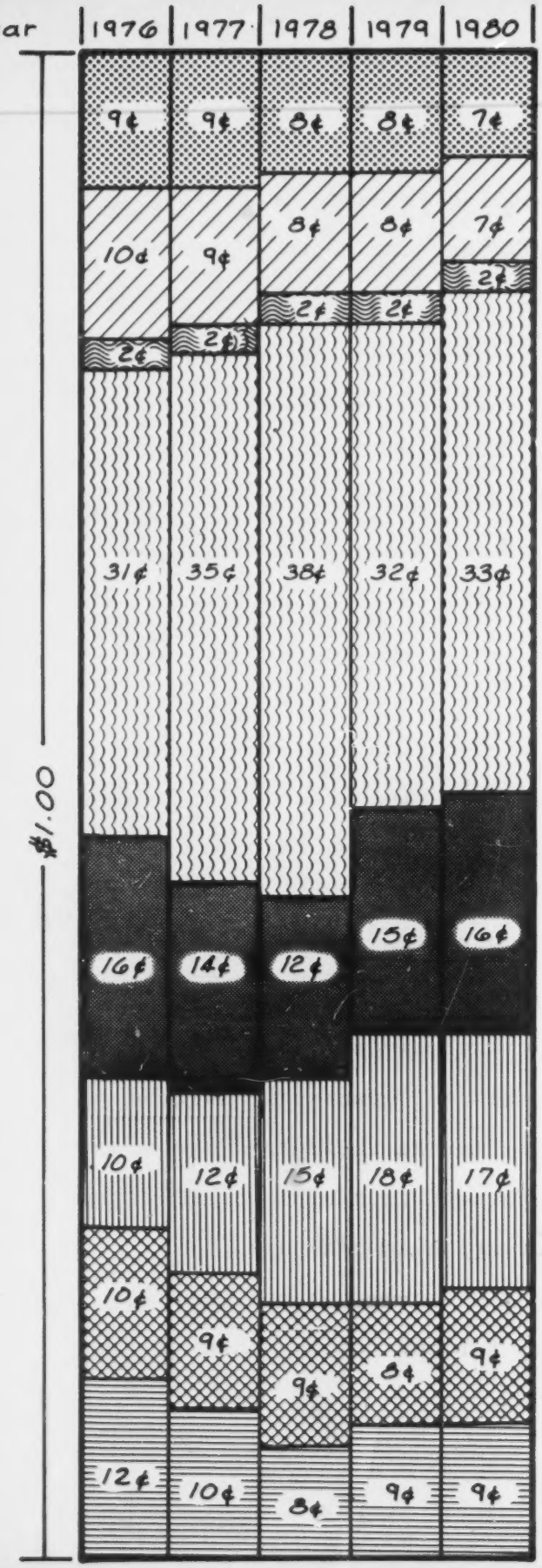
Section 210 of PURPA requires electric utilities to purchase electricity from cogenerators and small power producers. The purpose of this section is to encourage develop-

ment of alternative sources of energy. The PSC will develop appropriate regulations and establish rates to be paid by the regulated utilities for power purchased from cogenerators and small power producers.

What challenges lie ahead for this industry and the PSC? In the next biennium, the electric industry must devote more of its resources to encouraging customer conservation where nonessential uses of electricity are occurring, must expend resources to develop load management techniques and must forecast required generating capacity more accurately. Customers must not only learn to conserve but also when to do so.

In this decade the answer to the problems of the electric industry will be found through system interconnections and inter-company sales and exchanges and not through complete dependence by each company upon its own reserve capacity. Increasing cost per KWH for new generating capacity and the cost of obtaining capital in the marketplace make it essential that the Kentucky utilities develop new and innovative ways to use existing generating facilities. Utilities must strive to improve their load factor. The PSC looks forward to the implementation of innovative rates designed to promote conservation at peak usage and encourage off-peak usage and load management techniques designed to place responsibility for controlling peak on the management of each utility.

Chart E-1

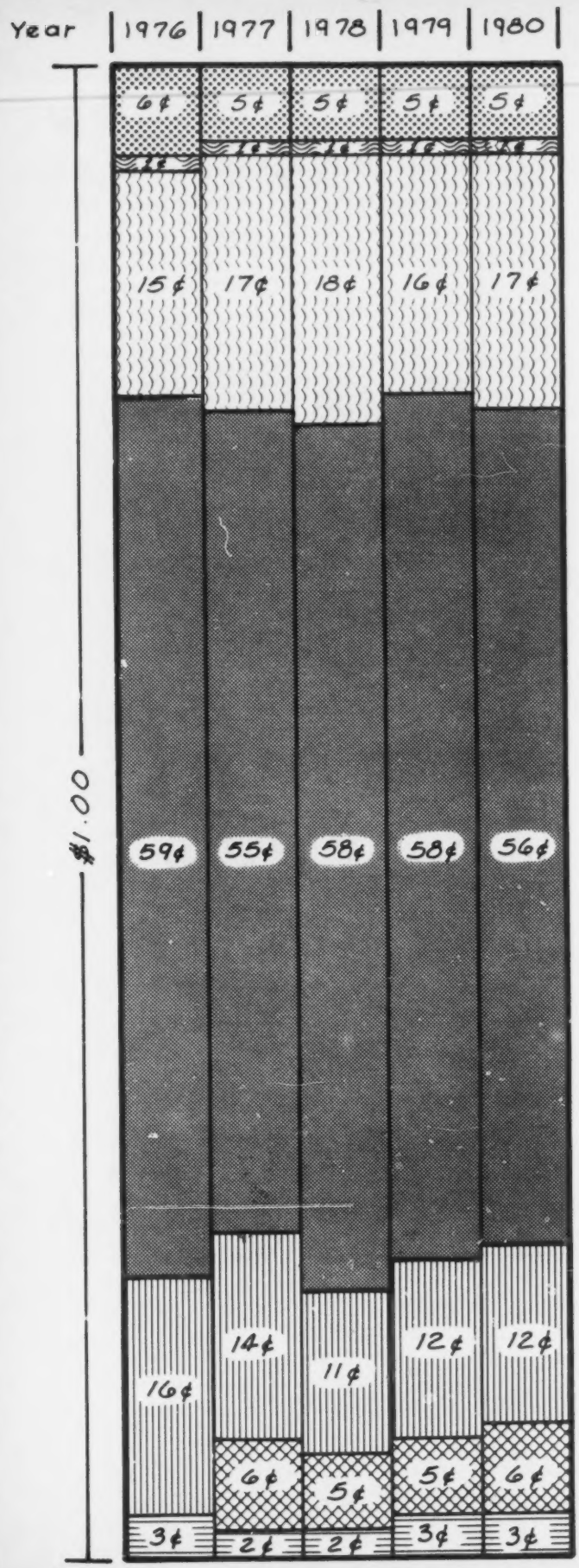


PRIVATELY OWNED
ELECTRIC COMPANIES

LEGEND

- Depreciation And Amortization Expenses
- Income Taxes
- Other Taxes
- Fuel Cost
- Purchased Power Expense
- Other Operating Expenses
- Interest Expense
- Net Income

Chart E-2



RURAL ELECTRIC
COOPERATIVE CORPORATIONS

LEGEND

- Depreciation And Amortization Expenses
- Taxes
- Fuel Cost
- Purchased Power Expense
- Other Operating Expenses
- Interest Expense
- Net Income

Residential Service—Averages

Table 6. Weighted Average Bills for Residential Service by Census Regions, 1981, 1980, and 1971 (Dollars)

Census Regions	January 1, 1981					January 1, 1980					January 1, 1971[1]			
	Kilowatthours					Kilowatthours					Kilowatthours			
	250	500	750	1,000	2,500	250	500	750	1,000	2,500	250	500	750	1,000
New England	23.80	43.76	57.89	76.57	184.66	16.87	33.82	43.82	57.63	132.33	8.83	12.04	16.62	21.88
Middle Atlantic	24.17	43.91	58.50	77.56	185.16	20.31[2]	36.66[2]	47.48[2]	63.14[2]	147.75[2]	9.16	13.24	17.72	23.06
East North Central	16.57	30.45	40.06	53.04	112.44	14.73	26.65	35.05	44.16	98.96	7.74	10.72	14.84	19.34
West North Central	14.97	27.53	37.38	48.49	97.23	13.92	25.62	33.89	44.22	91.72	7.69	11.04	15.20	19.50
South Atlantic	16.66	29.34	40.72	52.60	120.18	15.05	26.26	36.20	46.68	105.87	7.39	10.89	14.45	18.17
East South Central	13.80	24.40	34.55	45.01	103.35	11.49	20.09	28.48	37.19	85.41	6.51	9.56	12.41	15.31
West South Central	15.73	27.22	36.21	47.16	99.09	13.86	23.84	31.67	40.88	85.34	7.51	10.15	13.58	17.47
Mountain	16.31	28.29	38.55	49.99	108.11	14.79	25.45	34.22	44.32	95.19	7.51	10.52	14.13	18.10
Pacific	12.88	27.29	38.33	52.76	138.77	10.96	23.10[2]	31.59	43.68	112.73	6.81	9.89	12.91	15.91
Noncontiguous	25.61	45.05	64.48	84.19	202.52	21.23	36.33	51.55	66.96	159.89	9.38	14.14	19.27	24.41
U.S. Average	**17.76**	**32.61**	**43.99**	**58.16**	**133.90**	**15.29[2]**	**27.80[2]**	**36.94[2]**	**48.79[2]**	**110.91[2]**	**7.84**	**11.13**	**14.99**	**19.24**

[1]Data not collected in 1971 for 2,500 kWh.
[2]Revised figures.
Source: Energy Information Administration Form 213.

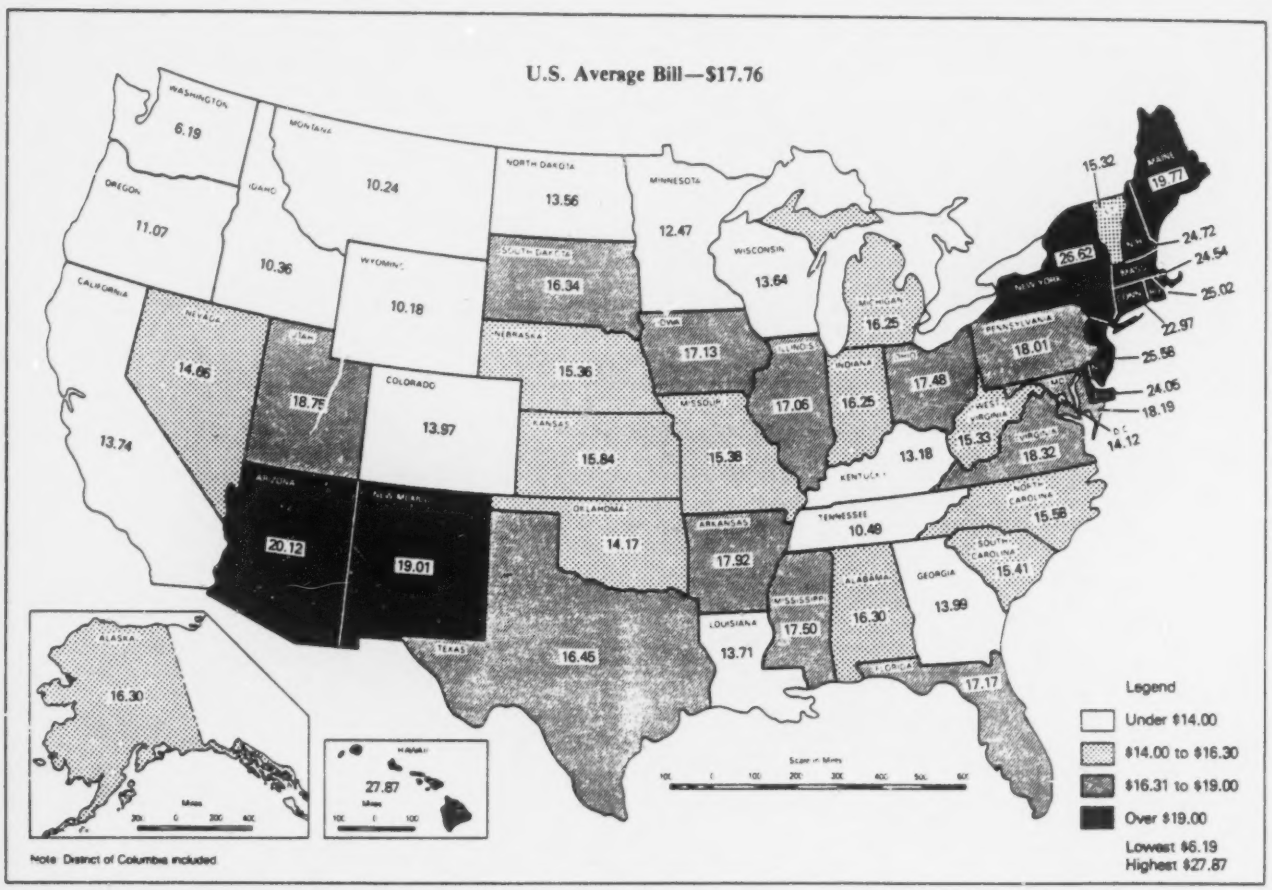


Figure 2. State Average Monthly Bills, 250 kWh Residential, January 1, 1981

Residential Service — Averages

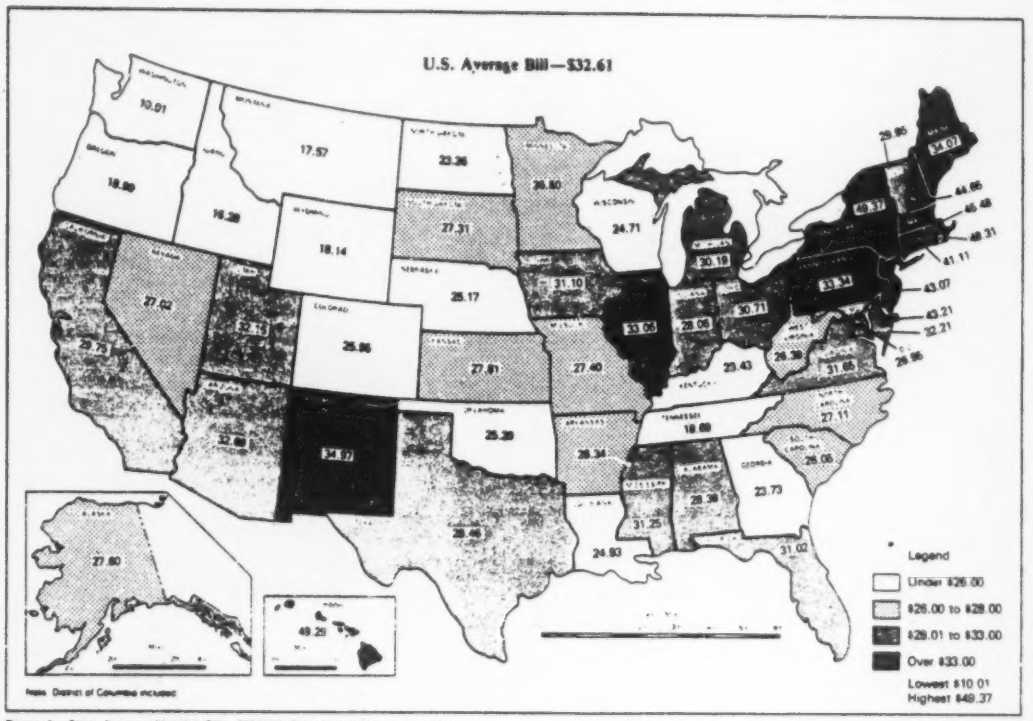


Figure 3. State Average Monthly Bills, 500 kWh Residential, January 1, 1981

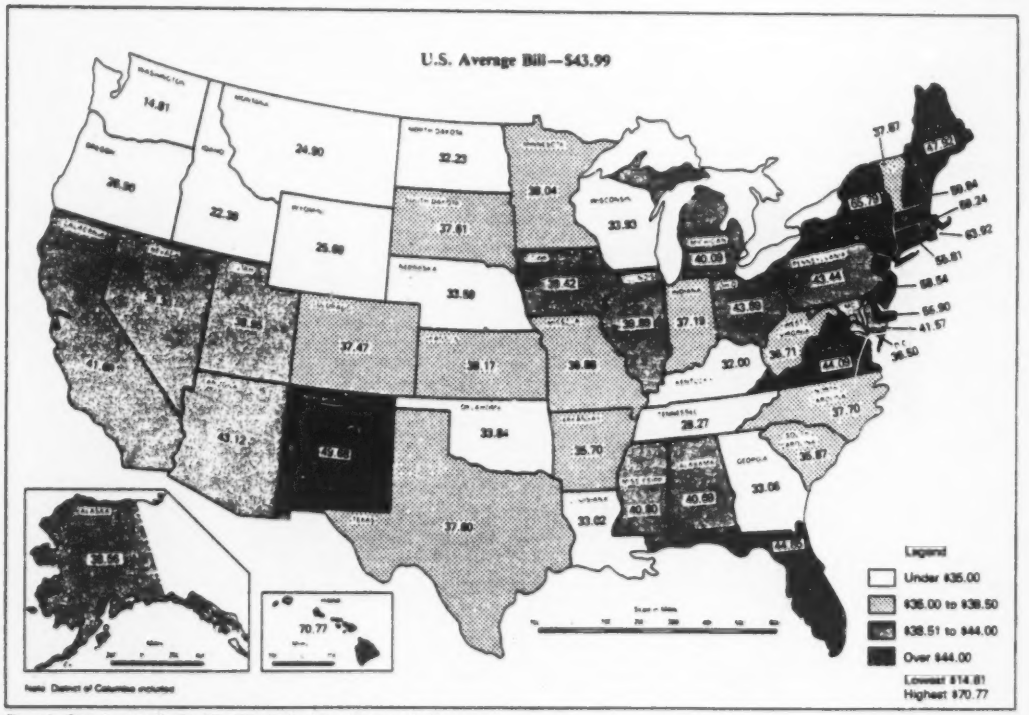


Figure 4. State Average Monthly Bills, 750 kWh Residential, January 1, 1981

Residential Service — Averages

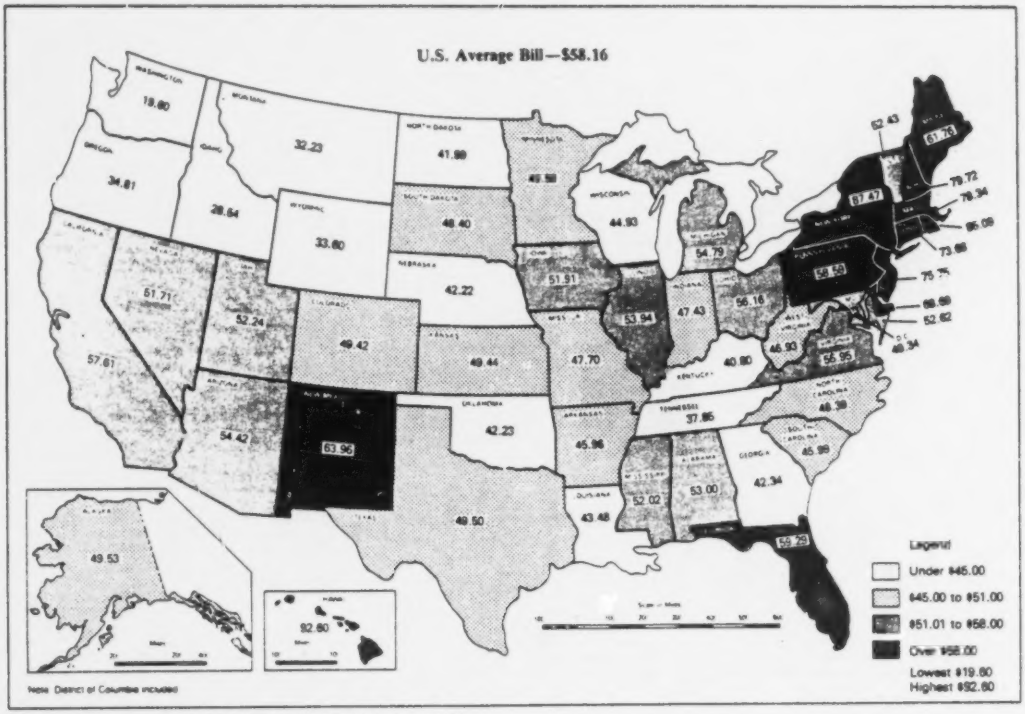


Figure 5. State Average Monthly Bills, 1,000 kWh Residential, January 1, 1981

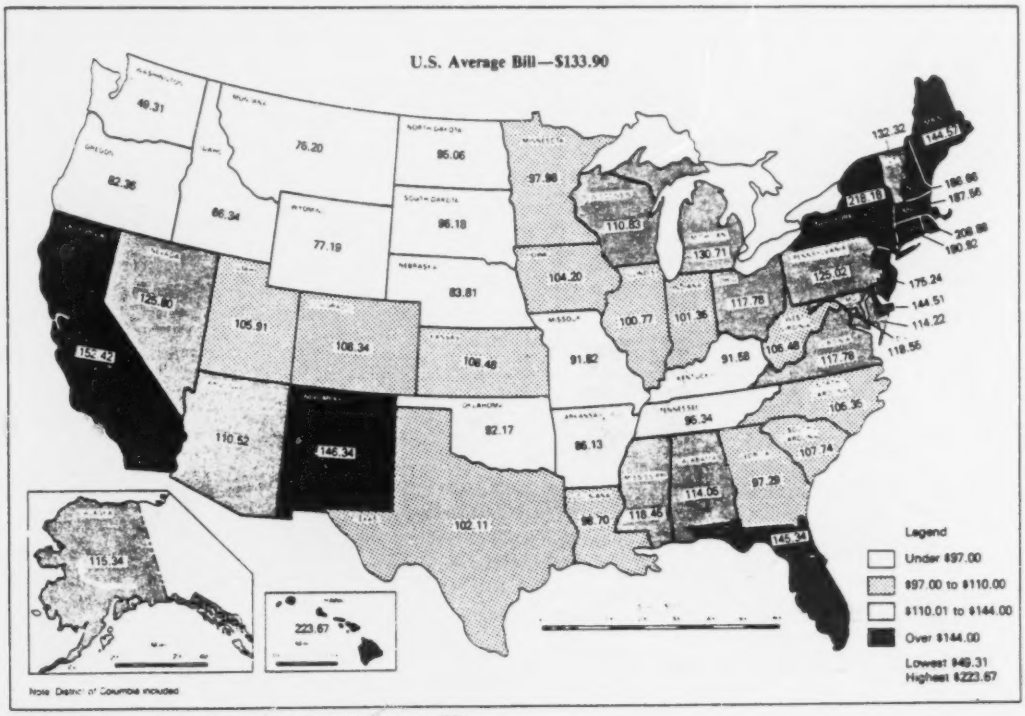


Figure 6. State Average Monthly Bills, 2,500 kWh Residential, January 1, 1981

Residential Service — Averages

Note: District of Columbia included.

Figure 7. Percent Change in State Average Monthly Bills, 500 kWh Residential, January 1, 1980 and 1981

Residential Service—Averages

Table 7A. State Average Typical Residential Bills, January 1, 1981 and January 1, 1980 (Dollars)

State	250 kWh		500 kWh		750 kWh		1,000 kWh		2,500 kWh	
	1981	1980	1981	1980	1981	1980	1981	1980	1981	1980
United States	**17.76**	**15.29**[1]	**32.61**	**27.80**[1]	**43.99**	**36.94**[1]	**58.16**	**48.79**[1]	**133.90**	**110.91**[1]
Alabama	16.30	13.53	28.38	23.63	40.69	33.99	53.00	44.34	114.05	94.11
Alaska	16.30	14.44	27.60	24.20	38.56	33.51	49.53	42.78	115.34	99.28
Arizona	20.12	19.03	32.69	31.02	43.12	40.95	54.42	51.64	110.52	104.79
Arkansas	17.92	13.98	26.34	22.61	35.70	28.58	45.96	37.00	86.13	73.10
California	13.74	11.59	29.75	25.07[1]	41.69	34.24	57.61	47.65	152.42	123.72
Colorado	13.97	12.35	25.95	22.85	37.47	32.86	49.42	43.27	108.35	93.09
Connecticut	22.97	19.75	41.11	33.93	55.81	44.78	73.68	57.95	180.92	139.14
Delaware	24.05	21.98	43.21	37.76	55.90	49.14	68.69	63.23	144.51	138.26
District of Columbia	14.12	11.01	26.95	20.09	36.50	27.31	49.34	36.39	118.55	87.04
Florida	17.17	14.37	31.02	25.53	44.85	36.68	59.29	48.37	145.34	117.89
Georgia	13.99	12.95	23.73	21.70	33.06	30.08	42.34	38.42	97.29	87.01
Hawaii	27.87	21.96	49.29	37.65	70.77	53.52	92.50	69.50	223.67	166.49
Idaho	10.36	8.83	16.28	13.65	22.38	18.46	28.54	23.28	66.34	52.70
Illinois	17.06	14.50	33.06	27.55	39.89	33.51	53.94	44.94	100.77	86.22
Indiana	16.25	15.50	28.06	26.68	37.19	35.22	47.43	44.83	101.36	88.44
Iowa	17.13	15.79	31.10	28.80	39.42	36.80	51.91	48.44	104.20	98.72
Kansas	15.84	14.42	27.81	25.21	38.17	34.43	49.44	44.58	108.48	97.28
Kentucky	13.18	11.64	23.43	20.34	32.00	27.71	40.80	35.27	91.58	78.95
Louisiana	13.71	11.63	24.93	20.32	33.02	26.47	43.48	35.04	98.70	77.49
Maine	19.77	15.69	34.07	26.05	47.92	35.98	61.76	45.91	144.57	105.16
Maryland	18.19	16.23	32.21	28.57	41.57	36.62	52.62	46.44	114.22	100.87
Massachusetts	24.54	18.81	45.48	34.41	59.24	44.30	78.34	58.69	187.56	130.72
Michigan	16.25	14.16	30.19	25.65	40.09	33.74	54.79	45.85	130.71	114.37
Minnesota	12.47	11.17	26.50	23.57	38.04	33.78	49.59	43.97	97.98	86.42
Mississippi	17.50	14.15	31.25	25.02	40.80	32.72	52.02	42.20	118.45	98.90
Missouri	15.38	14.98	27.40	27.01	36.88	33.69	47.70	44.45	91.82	95.28
Montana	10.24	8.77	17.57	14.99	24.90	21.20	32.23	27.41	76.20	64.71
Nebraska	15.36	13.73	25.17	22.46	33.59	29.51	42.22	37.26	83.81	73.59
Nevada	14.66	14.38	27.02	25.31	39.36	35.97	51.71	46.64	125.80	110.61
New Hampshire	24.72	19.60	44.65	34.41	59.84	44.69	79.72	59.02	186.66	133.82
New Jersey	25.58	20.71	43.07	35.12	58.54	46.61	75.75	60.02	175.24	136.90
New Mexico	19.01	16.88	34.97	30.85	49.68	43.25	63.96	55.71	146.34	129.75
New York	26.62	21.88[1]	49.37	40.12[1]	65.79	51.99[1]	87.47	69.57[1]	218.18	170.61[1]
North Carolina	15.58	13.76	27.11	24.05	37.70	32.63	48.39	41.83	105.35	90.41
North Dakota	13.56	13.31	23.36	22.94	32.23	31.48	41.99	40.67	95.06	90.91
Ohio	17.48	16.20	30.71	28.26	43.89	39.94	56.16	51.11	117.78	108.64
Oklahoma	14.17	12.76	25.29	22.51	33.84	29.69	42.23	36.72	92.13	78.56
Oregon	11.07	9.55	18.99	16.01	26.90	22.47	34.81	28.92	82.36	67.69
Pennsylvania	18.01	17.12	33.34	31.56	43.44	39.92	58.59	53.89	125.02	114.61
Rhode Island	25.02	19.32	48.31	35.42	63.92	44.36	85.09	56.57	208.88	141.23
South Carolina	15.41	15.21	26.05	25.40	35.87	34.77	45.99	44.38	107.74	102.57
South Dakota	16.34	14.69	27.31	24.92	37.61	33.32	48.40	42.85	96.18	89.06
Tennessee	10.49	8.52	18.69	14.80	28.27	22.44	37.85	30.16	95.34	76.45
Texas	16.45	14.72	28.46	25.28	37.80	33.93	49.50	43.87	102.11	90.39
Utah	18.75	16.59	32.16	27.86	38.95	31.51	52.24	42.76	105.91	86.32
Vermont	15.32	13.90	29.95	27.10	37.87	33.64	52.43	46.80	132.32	118.31
Virginia	18.32	19.01	31.65	33.10	44.09	46.31	55.95	58.92	117.78	125.40
Washington	6.19	6.04	10.01	9.40	14.81	12.91	19.60	16.44	49.31	39.73
West Virginia	15.33	13.13[1]	26.39	22.49[1]	36.71	30.88[1]	46.93	39.58[1]	106.48	88.50[1]
Wisconsin	13.64	11.98	24.71	21.71	33.93	29.85	44.93	39.42	110.83	94.75
Wyoming	10.18	8.70	18.14	15.43	25.69	21.68	33.60	28.32	77.19	64.83

[1]Revised figures.
Source: Energy Information Administration Form 213.

Residential Service—Ranking

Table 7B. Rank of States from Low to High, January 1, 1981 and January 1, 1980

State	250 kWh		500 kWh		750 kWh		1,000 kWh		2,500 kWh	
	1981	1980	1981	1980	1981	1980	1981	1980	1981	1980
Alabama	27	18	27	20	33	29	33	25	29	24
Alaska	27	28	24	22	27	22	25	20	31	30
Arizona	43	44	39	41	37	41	35	40	27	33
Arkansas	36	22	16	15	14	10	14	11	7	6
California	12	9	29	16	36	30	39	36	44	41
Colorado	13	13	14	17	20	20	22	22	25	23
Connecticut	44	47	44	44	44	46	45	43	46	48
Delaware	45	51	46	50	45	49	44	49	40	47
District of Columbia	15	7	19	7	16	8	21	9	35	16
Florida	33	25	33	29	41	37	41	37	42	39
Georgia	14	15	9	10	10	14	11	13	14	15
Hawaii	51	50	50	49	51	51	51	51	51	50
Idaho	4	5	2	2	2	2	2	2	2	2
Illinois	31	29	40	35	31	22	34	30	17	12
Indiana	25	34	26	32	19	33	17	29	18	18
Iowa	32	36	34	39	30	38	28	38	20	28
Kansas	24	27	25	25	26	31	23	28	26	27
Kentucky	8	11	8	9	7	9	7	8	8	11
Louisiana	11	10	11	8	9	7	12	7	16	9
Maine	42	35	42	31	42	35	42	32	41	34
Maryland	38	38	38	38	35	36	32	33	30	31
Massachusetts	46	42	48	45	47	43	47	45	48	44
Michigan	25	24	31	30	32	26	36	31	38	37
Minnesota	7	8	18	19	25	27	26	24	15	14
Mississippi	35	23	35	24	34	19	29	18	34	29
Missouri	21	32	23	33	18	25	18	27	9	26
Montana	3	4	3	4	3	3	3	3	3	3
Nebraska	20	19	12	13	11	11	9	12	6	7
Nevada	17	26	20	27	29	34	27	34	37	36
New Hampshire	47	46	47	45	48	45	48	47	47	45
New Jersey	49	48	45	47	46	48	46	48	45	46
New Mexico	41	40	43	40	43	42	43	42	43	43
New York	50	49	51	51	50	50	50	50	50	51
North Carolina	23	20	21	21	22	18	19	17	21	21
North Dakota	9	17	7	18	8	16	8	16	11	22
Ohio	34	37	32	37	39	40	38	39	32	35
Oklahoma	16	14	13	14	12	12	10	10	10	10
Oregon	6	6	6	6	5	6	5	5	5	5
Pennsylvania	37	41	41	42	38	39	40	41	36	38
Rhode Island	48	45	49	48	49	44	49	44	49	49
South Carolina	22	33	15	28	15	32	15	26	24	32
South Dakota	29	30	22	23	21	21	20	21	13	19
Tennessee	5	2	5	3	6	5	6	6	12	8
Texas	30	31	28	26	23	28	24	23	19	20
Utah	40	39	37	36	28	17	30	19	22	13
Vermont	18	21	30	34	24	24	31	35	39	40
Virginia	39	43	36	43	40	47	37	46	33	42
Washington	1	1	1	1	1	1	1	1	1	1
West Virginia	19	16	17	12	17	15	16	14	23	17
Wisconsin	10	12	10	11	13	13	13	15	28	25
Wyoming	2	3	4	5	4	4	4	4	4	4

Source: •Energy Information Administration Form 213.

Commercial Service — Averages

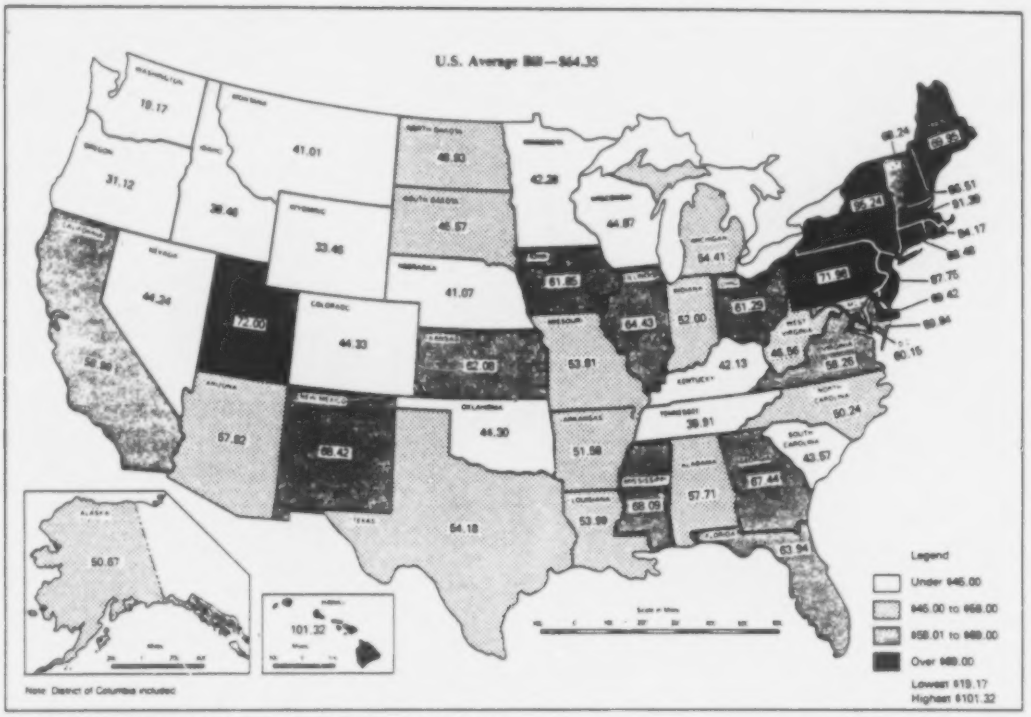


Figure 9. State Average Monthly Bills, 6 kWh-750 kWh Commercial, January 1, 1981

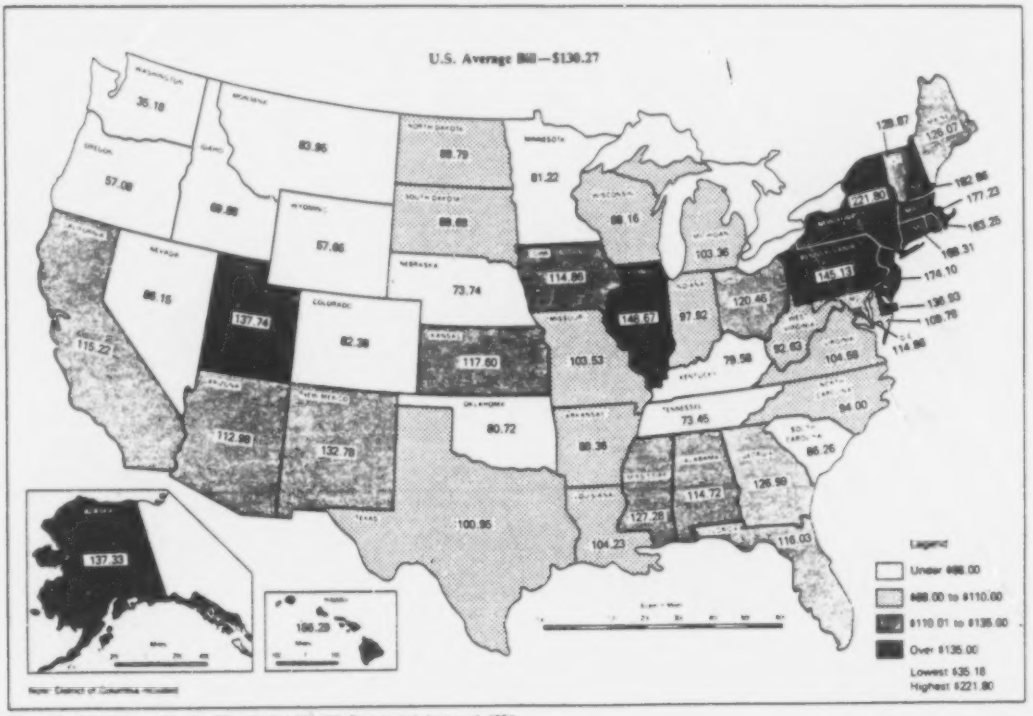


Figure 10. State Average Monthly Bills, 12 kW-1,000 kWh Commercial, January 1, 1981

Commercial Service — Averages

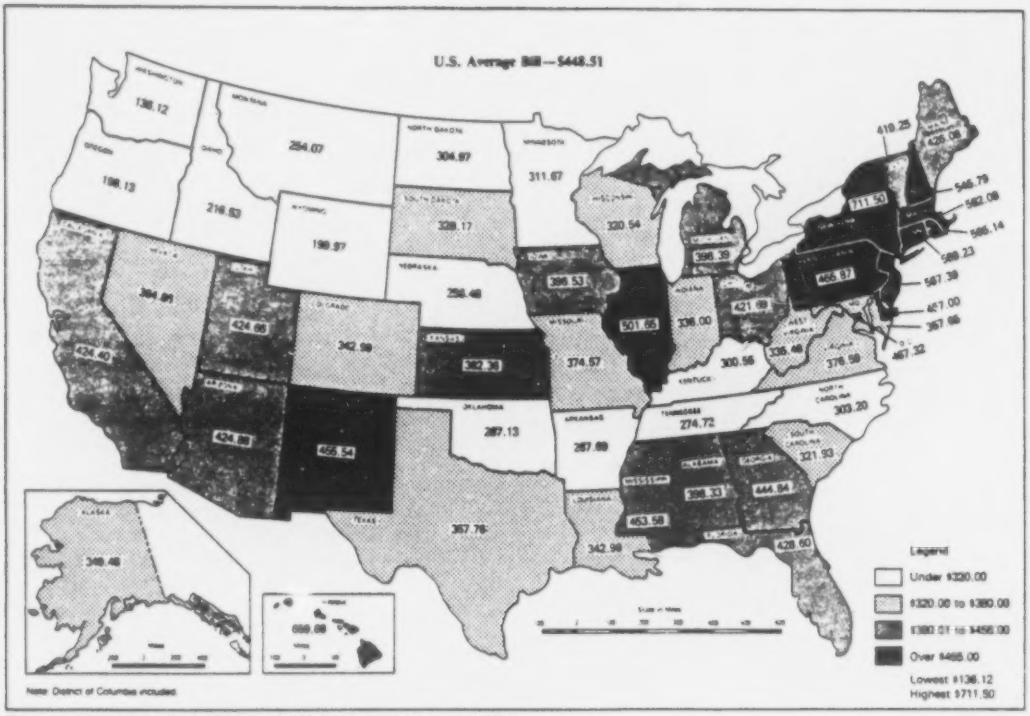


Figure 11. State Average Monthly Bills, 30 kW-6,000 kWh Commercial, January 1, 1981

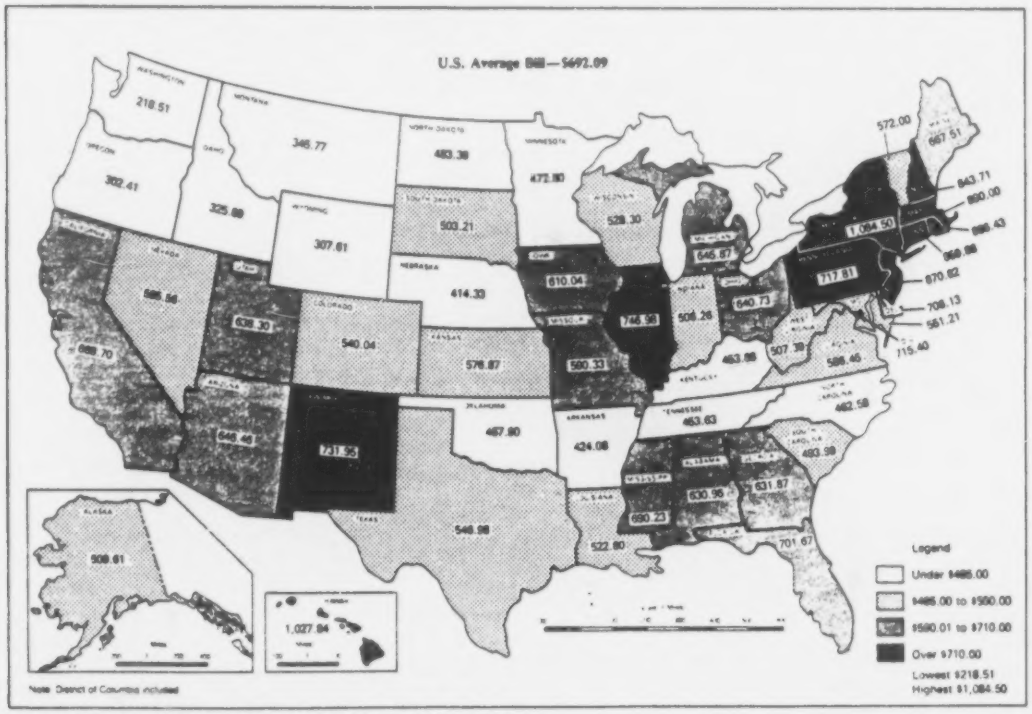


Figure 12. State Average Monthly Bills, 40 kW-10,000 kWh Commercial, January 1, 1981

Commercial Service — Averages

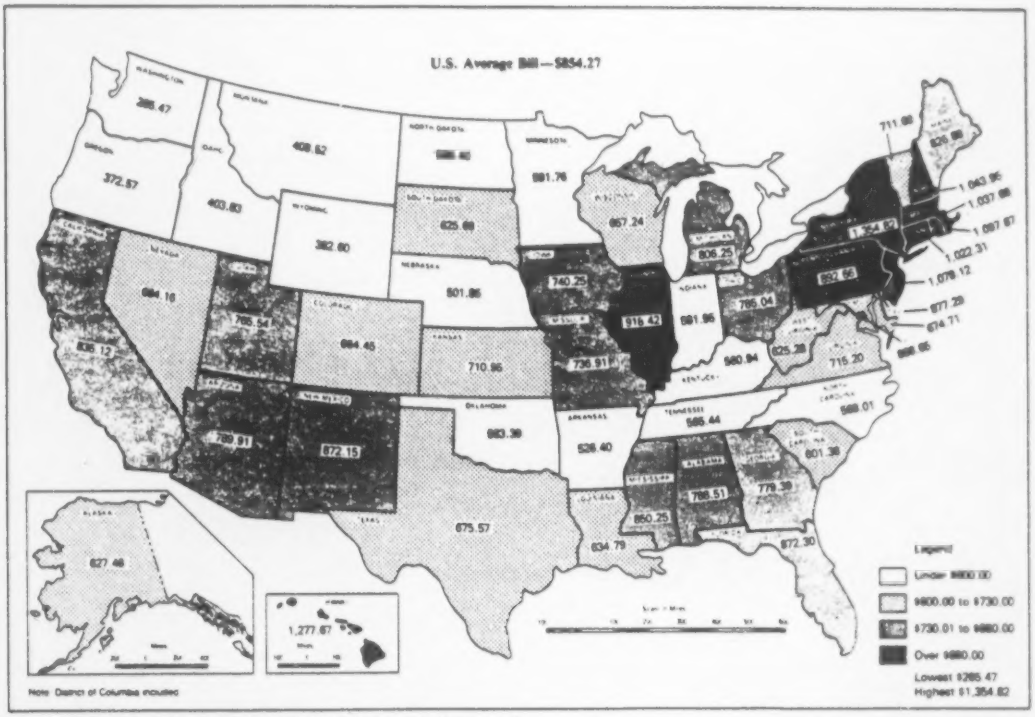


Figure 13. State Average Monthly Bills, 50 kW-12,500 kWh Commercial, January 1, 1981

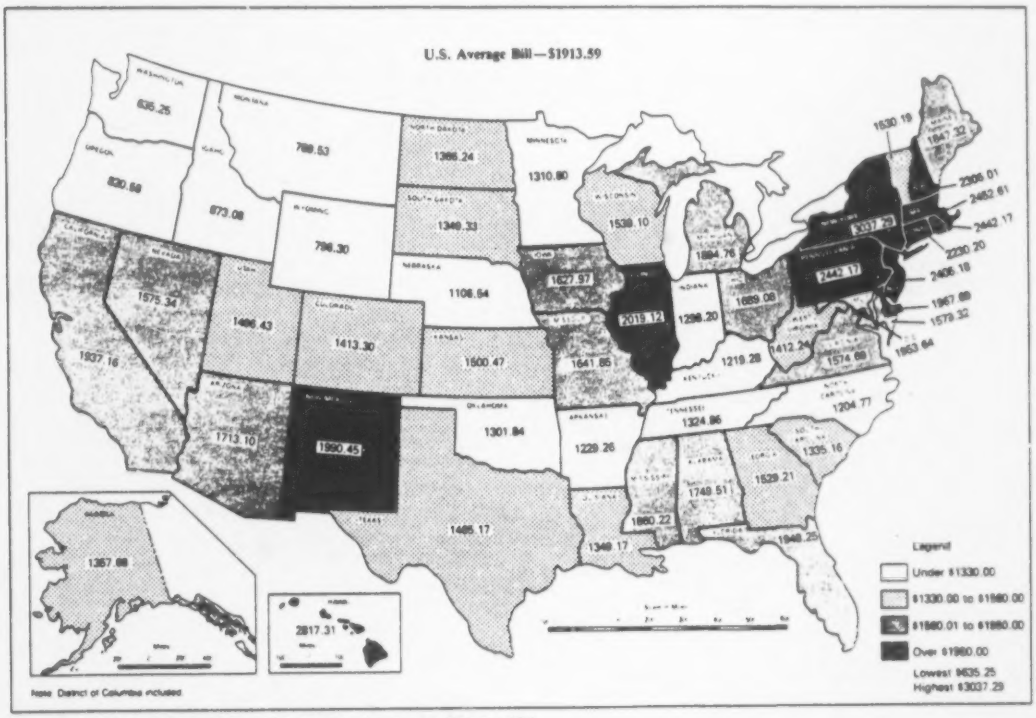


Figure 14. State Average Monthly Bills, 100 kW-30,000 kWh Commercial, January 1, 1981

Table 16. Weighted Average Bills for Industrial Service by Census Regions, 1981, 1980, and 1971 (Dollars)

Census Regions	January 1, 1981				January 1, 1980				January 1, 1971[1]		
	150 kW 30,000 kWh	300 kW 60,000 kWh	1,000 kW 200,000 kWh	5,000 kW 1,500,000 kWh	150 kW 30,000 kWh	300 kW 60,000 kWh	1,000 kW 200,000 kWh	5,000 kW 1,500,000 kWh	150 kW 30,000 kWh	300 kW 60,000 kWh	1,000 kW 200,000 kWh
New England	2,411	4,680	15,114	103,817	1,838	3,553	11,362	76,379	715	1,332	3,992
Middle Atlantic	3,021	5,950	17,108	108,561	2,536	5,034	16,261	100,849	977	1,814	5,473
East North Central	1,928	3,729	11,855	72,477	1,658	3,183	10,038	61,191	721	1,325	4,013
West North Central	1,633	3,130	9,712	60,071	1,421	2,786	8,800	52,764	670	1,237	3,642
South Atlantic	1,818	3,537	11,512	69,137	1,590	3,100	10,031	54,337	623	1,125	3,320
East South Central	1,715	3,367	10,597	63,734	1,368	2,670	8,205	49,994	547	1,024	2,992
West South Central	1,573	3,056	9,627	60,863	1,360	2,621	8,170	51,683	558	1,010	2,850
Mountain	1,694	3,260	10,058	63,430	1,540	2,943	9,040	57,135	590	1,101	3,244
Pacific	1,869	3,725	12,057	84,669	1,479	2,904	9,162	68,777	497	874	2,585
Noncontiguous	2,595	5,050	16,135	106,907	2,035	3,934	12,408	80,361	701	1,304	3,984
U.S. Average	**2,114**	**4,128**	**12,758**	**81,486**	**1,757**	**3,431**	**10,910**	**68,874**	**692**	**1,269**	**3,774**

[1]Data not collected in 1971 for 5,000 kW-1,500,000 kWh.
Source: Energy Information Administration Form 213.

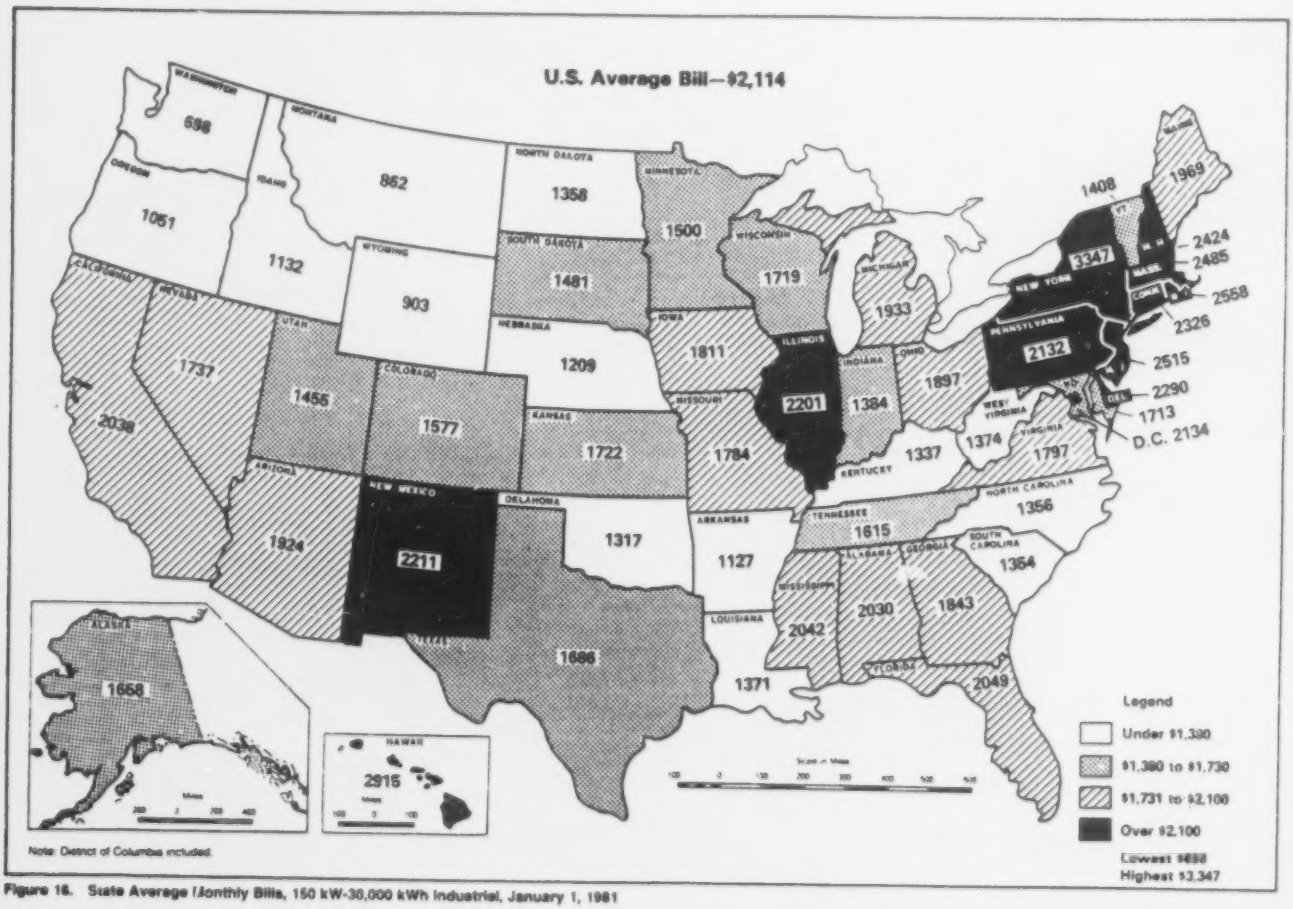


Figure 16. State Average Monthly Bills, 150 kW-30,000 kWh Industrial, January 1, 1981

Industrial Service — Averages

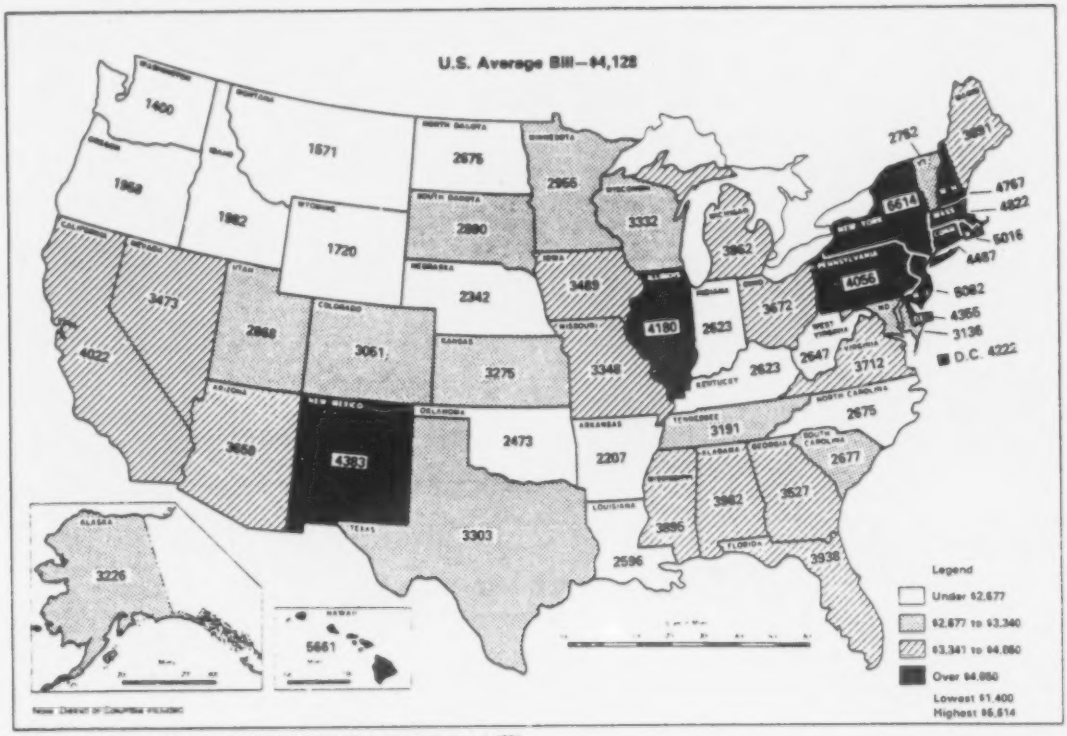


Figure 17. State Average Monthly Bills, 300 kW-40,000 kWh Industrial, January 1, 1981

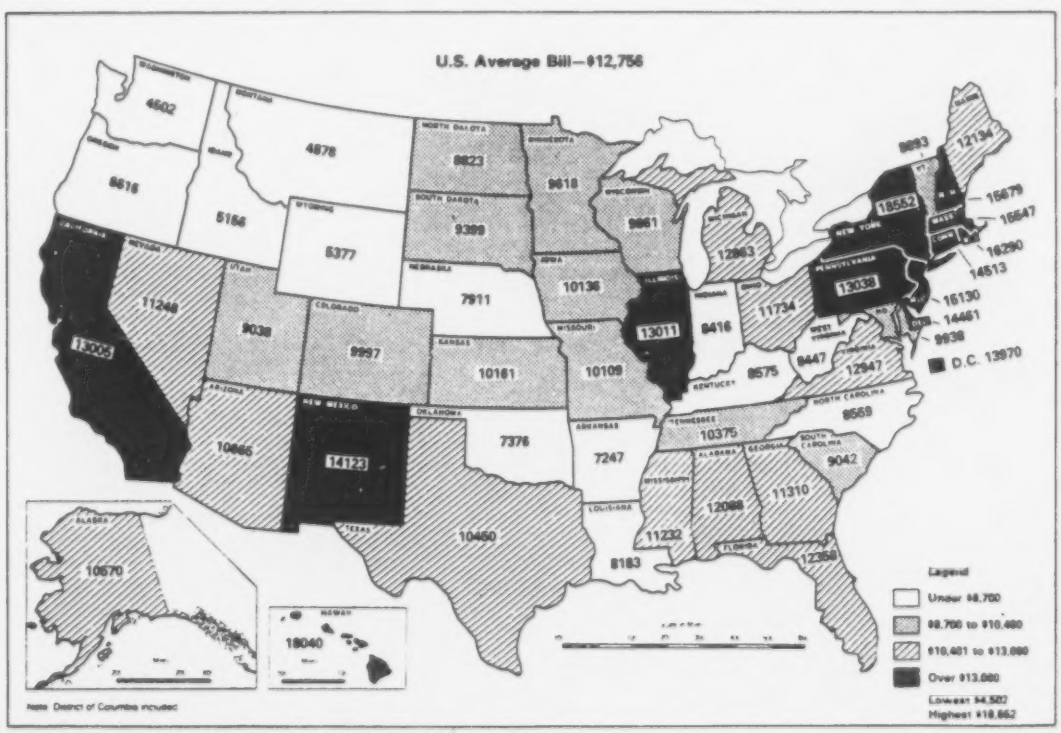


Figure 18. State Average Monthly Bills, 1,000 kW-200,000 kWh Industrial, January 1, 1981

Industrial Service — Averages

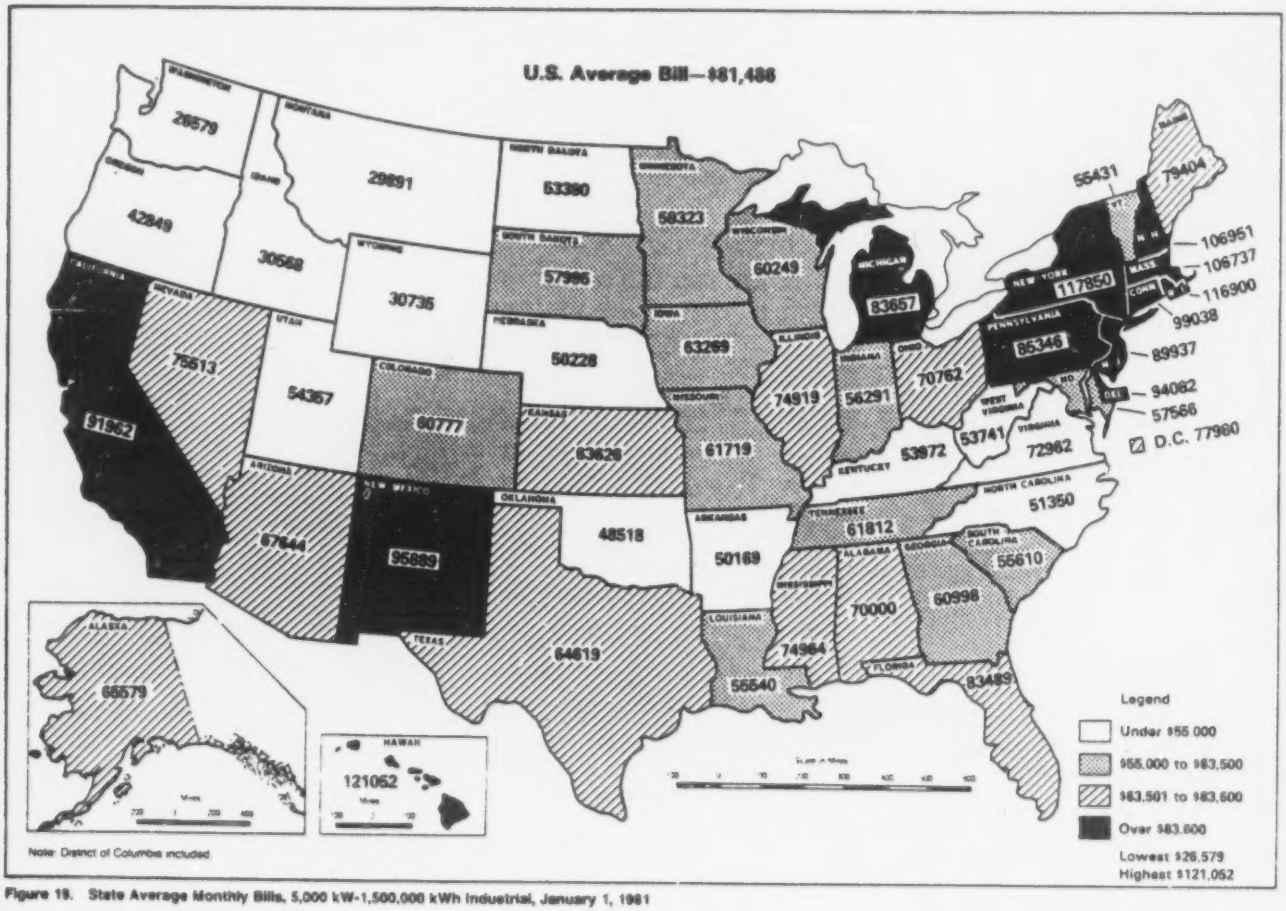


Figure 19. State Average Monthly Bills, 5,000 kW-1,500,000 kWh Industrial, January 1, 1981

Chart E-15

INVESTOR-OWNED ELECTRIC COMPANIES

SUMMARY OF FINAL ORDERS ISSUED

	Biennium 7-1-71/ 6-30-73 $	Biennium 7-1-73/ 6-30-75 $	Biennium 7-1-75/ 6-30-77 $	Biennium 7-1-77/ 6-30-79 $	Biennium 7-1-79/ 6-30-81 $
Bonds	184,300,000	86,100,000	253,000,000	52,000,000	335,000,000
No. of Orders	6	4	9	2	6
Stocks	38,580,806	6,956,490	105,861,500	68,000,000	187,000,000
No. of Orders	2	1	8	6	9
Notes	5,750,000	1,996,250		54,000,000	171,000,000
No. of Orders	2	2		2	4
Total Securities	228,630,806	95,052,740	358,861,500	174,000,000	693,000,000
No. of Orders	10	7	17	10	19
Revision of Basic Rates Requested	21,705,267	42,640,474(1)	73,734,617(2)	108,698,325	160,616,417
Revision of Basic Rates Granted	6,020,680	28,255,260(1)	47,923,291(2)	71,448,665	108,343,948
No. of Orders	3	7	8	7	6
Flow-Through Rates Requested					3,386,501
Flow-Through Rates Granted					3,383,333
No. of Orders					2
Construction	566,750,632	486,694,149	79,600,066	1,475,151,590	245,000
No. of Orders	7	13	10	9	1
Franchise					
No. of Orders	10	26	6	14	18
Miscellaneous					
No. of Orders	22	13	16	32	37
Total Number of Final Orders	52	66	57	72	82

(1) Includes Fuel Adjustment Clause
(2) Does Not Include Fuel Adjustment Clause

Chart E-16

RURAL ELECTRIC COOPERATIVE CORPORATIONS

SUMMARY OF FINAL ORDERS ISSUED

	Biennium 7-1-71/ 6-30-73 $	Biennium 7-1-73/ 6-30-75 $	Biennium 7-1-75/ 6-30-77 $	Biennium 7-1-77/ 6-30-79 $	Biennium 7-1-79/ 6-30-81 $
Bonds	78,000,000			5,575,000	
No. of Orders	1			1	
Notes	78,240,000	350,011,908	543,698,800	211,031,996	2,953,891,000
No. of Orders	40	54	43	44	29
Total Securities	156,240,000	350,011,908	543,698,800	216,606,996	2,953,891,000
No. of Orders	41	54	43	45	29
Revision of Basic Rates Requested	1,442,744	15,878,546(1)	48,301,946(2)	57,292,667	110,464,653
Revision of Basic Rates Granted	1,227,639	13,979,483(1)	40,174,497(2)	42,156,654	95,040,336
No. of Orders	12	26	37	50	32
Flow-Through Rates Requested					95,005,074
Flow-Through Rates Granted					84,356,363
No. of Orders					62
Construction	155,401,894	358,631,714	513,008,415	203,049,478	2,768,945,155
No. of Orders	38	54	40	40	29
Franchise					
No. of Orders			1	5	
Miscellaneous					
No. of Orders	10	21	28	62	111
Total Number of Final Orders	101	155	149	202	263

(1) Includes Fuel Adjustment Clause
(2) Does Not Inlcude Fuel Adjustment Clause

The Gas Utility Industry

The PSC has regulatory jurisdiction over the following natural gas utilities:

Investor-owned (rates and service)	-	29
Gas districts	-	2
Gas pipeline (safety)	-	8
Total		39

The customers of the natural gas industry have continued to face significant increases in the cost of natural gas. The largest single cause is the Natural Gas Policy Act ("NGPA") of 1978 which requires deregulation of natural gas at the well-head. The purpose of deregulation was to allow the price of natural gas to rise to the level of competing energy sources such as oil and coal and thus increase the gas supply by encouraging new production. Under NGPA, small producers are permitted to raise the price of natural gas from qualifying wells to the price of number two fuel oil without regulatory approval. The impact on Kentucky residential customers has been devastating, as can be seen in the following chart:

Year	Average Cost Per mcf
1976	$ .91
1977	1.19
1978	1.36
1979	1.71
1980	2.19
November 1981	3.00

The average cost paid for natural gas by the industry through November 1981 is as follows: Louisville Gas and Electric, $2.72 per mcf; Columbia Gas of Kentucky, $3.31 per mcf; Delta Natural Gas, $3.55 per mcf; Western Kentucky Gas, $2.69 per mcf; and Union Light, Heat and Power Company, $3.83 per mcf. The following chart shows the range of cost per mcf paid by the small distribution utilities through November 1981:

Number of Utilities	Cost Per mcf
4	$1.50 to $2.00
1	2.00 to 2.50
2	2.50 to 3.00
1	3.00 to 3.50
6	3.50 to 4.00
5	4.00 to 4.50

The average retail price paid by customers of the large gas distribution utilities was $3.27 per mcf during January 1981 while customers of small gas distribution utilities paid approximately $4.50 per mcf. For some of these small gas utilities, the retail rates paid during the winter of 1981-82 will exceed $6 per mcf.

Customers have responded to the constant rise in the price of natural gas by curtailing usage. The industry average annual residential use peaked at 142 mcf in 1978, declining to 135 mcf in 1979 and to 129 mcf in 1980.

Chart G-1 shows the costs covered by each dollar of revenue collected from gas utility customers for the years

ending December 31, 1976, through December 31, 1980. The largest single item, purchased gas expense, consumed $.77 of each $1.00 of revenue in 1980. The increase in the percentage of each dollar of revenue required to cover this expense is a direct result of federal deregulation of natural gas at the well-head, over which neither the utilities nor the PSC has any control.

Chart G-2 provides a comparison of the average mcf usage and bill for residential customers of four of the major gas utilities. By comparing the usage and bills of each utility for each month of the 1979-80 heating season with each month of the 1980-81 heating season, it is clear that customers are paying more for less.

The PSC's gas utility workload for the last five bienniums is summarized in Chart G-3. Most of the growth during the current biennium results from requests for purchased gas adjustments to reflect increases in wholesale gas costs and from orders granting deviations from PSC regulations on plastic pipe and outdoor lighting, allowing discontinuance of service, and requiring correction of deficiencies found during safety investigations.

The PSC received 150 complaints from gas industry customers relating to rates or service, most of which were resolved on an informal basis.

Along with the Department for Local Government and the federal government, the PSC has actively participated in the

Gas Restoration Program which provides funds at reasonable rates to restore small gas distribution systems. These systems often have unsafe conditions or poor service. These efforts have resulted in the restoration of five systems during the biennium.

The PSC issued orders approving $3,097,366 in construction during the biennium. This represents a significant increase over the construction for the 1977-79 biennium of $557,032 but remains substantially below the level of construction experienced during the 1971-73 and 1973-75 bienniums.

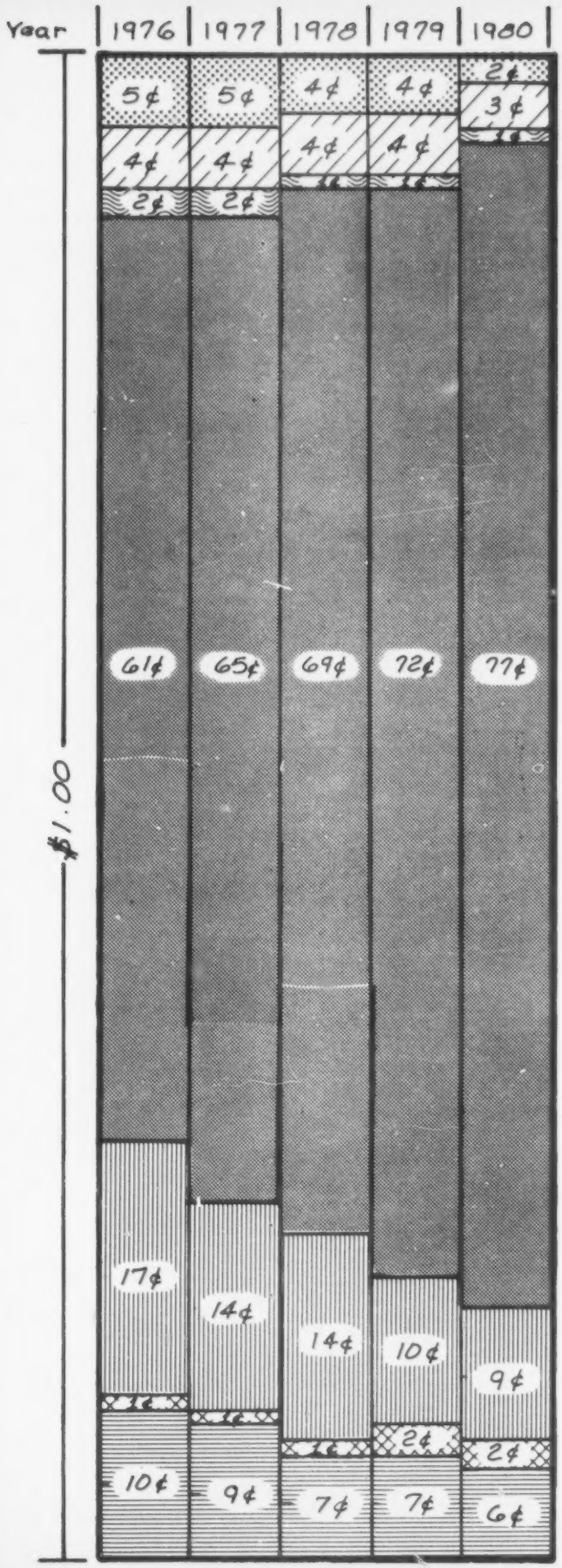
The PSC expects that gas industry customers will continue to experience rising costs resulting from deregulation under the NGPA of 1978.

The PSC is concerned that rates charged customers of small, isolated distribution systems may soon be prohibitive. The ability of these systems to continue to absorb the ever-increasing gas and employee-management costs is doubtful. Therefore, the PSC believes it is entirely appropriate to encourage these small systems to merge with major distributors of natural gas. This policy is consistent with the PSC's policy toward the electric and telephone industries during the first 10 years of regulation and may be the only way customers of isolated systems can continue to receive gas service at reasonable rates.

During this biennium the PSC implemented regulations requiring each gas utility to offer a budget billing plan. Although such plans do not lower the customer's cost, they generally allow the high cost of winter heating to be spread over the year.

In the next biennium and during this decade, the PSC intends to intervene in and actively participate in gas rate proceedings at the federal level.

Chart G-1



GAS COMPANIES AND DISTRICTS

LEGEND

- Depreciation And Amortization Expense
- Income Taxes
- Other Taxes
- Purchased Gas Expense
- Other Operating Expense
- Interest Expenses
- Net Income

Comparison of Gas Bills and Usage
For the 1979-80 and 1980-81 Heating Season

	Union Light, Heat and Power		Western Kentucky Gas		Columbia Gas of Kentucky		Louisville Gas and Electric	
	No. MCF	Bill	No. MCF	Bill	No. MCF	Bill	No. MCF	Bill
Dec. 1979	19.60	$ 65.17	16.10	$38.22	16.40	$54.56	16.40	$39.26
1980	19.70	71.64	15.45	44.15	17.25	60.40	16.29	49.96
Jan. 1980	20.70	76.86	20.90	53.25	21.10	74.54	20.00	51.73
1981	28.49	102.54	24.11	69.57	25.65	89.19	24.51	74.21
Feb. 1980	27.01	88.65	22.29	60.15	23.62	83.26	22.80	62.87
1981	25.71	93.26	21.17	64.79	21.19	73.88	20.96	66.13
March 1980	24.54	82.74	19.68	53.62	19.20	71.65	19.90	55.10
1981	19.90	71.84	14.41	44.55	16.95	63.61	15.30	54.61
April 1980	14.83	50.96	12.08	33.23	12.36	46.74	12.90	36.26
1981	10.80	43.66	8.69	27.16	8.97	34.84	8.90	32.54

Chart G-3

GAS COMPANIES AND GAS DISTRICTS

SUMMARY OF FINAL ORDERS ISSUED

	Biennium 7-1-71/ 6-30-73	Biennium 7-1-73/ 6-30-75	Biennium 7-1-75/ 6-30-77	Biennium 7-1-77/ 6-30-79	Biennium 7-1-79/ 6-30-81
	$	$	$	$	$
Bonds	26,300,000	30,900,000	4,500,000	4,430,000	
No. of Orders	3	3	2	1	
Stocks	3,299,894	300,000			7,525,000
No. of Orders	2	1			5
Notes	14,130,000	7,568,500	25,500,000	24,390,500	18,793,726
No. of Orders	4	4	3	5	10
Total Securities	43,729,894	38,768,500	30,000,000	28,820,500	26,318,726
No. of Orders	9	8	5	6	15
Revision of Basic Rates Requested	7,043,507	10,719,038	22,139,825	20,416,939	20,633,225
Revision of Basic Rates Granted	3,628,443	7,938,622	11,958,699	15,045,320	19,653,397
No. of Orders	16	20	29	18	16
Purchased Gas Adjustment Requested	2,213,052	59,601,182	63,009,734	59,096,671	121,627,308
Purchased Gas Adjustment Granted	1,326,860	59,595,130	62,480,211	59,004,307	121,615,861
No. of Orders	43	176	231	226	273
Construction	56,072,198	63,100,498	2,900,000	557,032	3,097,366
No. of Orders	7	6	2	2	6
Franchise					
No. of Orders	13	26	8	21	19
Miscellaneous					
No. of Orders	65	74	117	87	165
Total Number of Final Orders	153	310	392	360	494

The Communications Industry

The industry is composed of the following carriers:

Investor-owned telephone utilities	-	12
Rural telephone cooperatives	-	10
Radio common carriers	-	24
Total		46

The average number of customers served by this industry through December 1978 was 1,258,531 as compared to 1,317,845 through December 1980. Gross plant increased from $1,367 to $1,672 per customer during this period. The PSC approved orders for securities issues of $69,369,000 and certificates of construction for projects exceeding 10 percent of net plant in the amount of $24,314,153. Revenue per average main station increased from $38 in 1978 to $44 in 1980.

Chart C-1 depicts the costs covered by each dollar of revenue collected from customers by the investor-owned telephone utilities and rural telephone cooperative corporations. The most significant change from 1979 to 1980 was the increase of the amount of each dollar of revenue going to net income from 8 to 11 cents. The 1980 amount was approximately the same as that of 1976, 1977 and 1978.

This same information is presented in Chart C-2 for radio common carriers. This sector of the industry is composed of small utilities which provide two-way mobile

communications service. They have experienced a decline in the amount of each dollar of revenue going to net income.

Chart C-3 compares the Commission's workload for the last five bienniums. While the number of formal orders remained fairly constant over the last two bienniums the requests for rate relief increased by approximately 73 percent. The PSC received 1776 complaints during the biennium relating to service, upgrading of service, billing, deposits, disconnection and service area. Most of these complaints were resolved on an informal basis.

Since its creation, the PSC has encouraged and promoted the extension of service to all Kentuckians at reasonable rates, and elimination of multiple-party service. Working with the PSC the regulated industry has been extremely successful in achieving both goals.

The communications industry is expected to change dramatically during the next biennium and the remainder of this decade. Modifications brought about for the most part by the Federal Communications Commission ("FCC") and changes that will result from Senate Bill 898 will cause significant upward pressure on the rates paid by users of local service.

The FCC's goal of deregulation of interstate telephone service began with the Carterfone decision in 1968, which allowed a customer to connect his or her own terminal equipment to the telephone network. Following that decision the

FCC set up a certification program which allowed terminal equipment registered with the FCC to be connected to the telephone network thus eliminating the requirement of protective devices. This program made possible the advent of competition in the terminal equipment market.

The FCC has initiated several proceedings designed to promote competition. In its Computer II Inquiry, it proposes to deregulate all terminal equipment by January 1, 1983. The investment in terminal equipment would no longer be considered in fixing interstate rates.

The FCC also has changed its accounting procedures to permit regulated carriers to expense station connections. The FCC has allowed the carriers to change the method of computing depreciation from vintage straight line to remaining life on existing plant and is considering the equal life group method for new additions. All of these actions by the FCC will increase rates paid for local exchange service. For South Central Bell the annual cost to the local user of expensing station connections will be approximately $25 million and of changing depreciation methods, $11 million. The cost to the local ratepayer of deregulation of terminal equipment has not been quantified.

In 1980 a joint board composed of three federal and four state utility commissioners was convened to consider required changes in procedures used to separate costs between

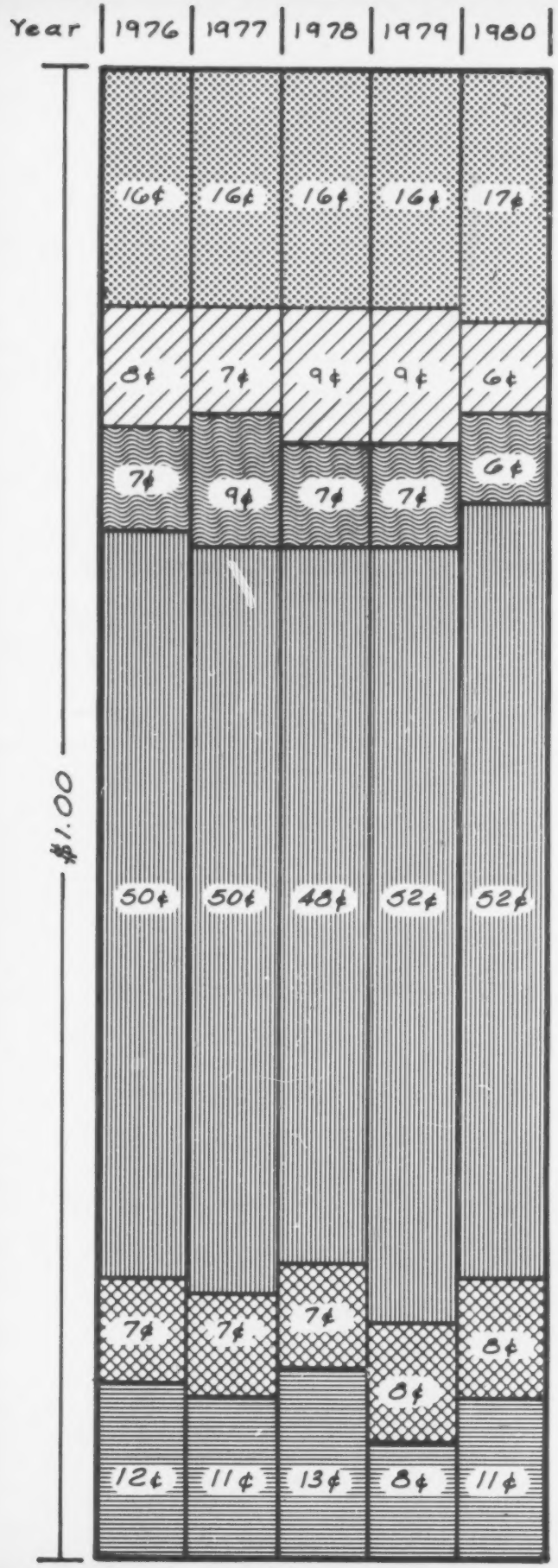
federal and state jurisdictions. A member of the PSC staff is on the federal-state joint board staff. The joint board is empowered to make recommendations to the FCC. To date, most of its recommendations have been for piecemeal changes to the separations procedures which appear to be designed to accommodate the FCC's goal of deregulation and its accounting change to expense station connections. The PSC has communicated its objections to this piecemeal approach to the FCC.

The federal government is also encouraging deregulation. In 1981 Senate Bill 898 was approved by the Senate and sent to the House. This bill would have deregulated interstate toll, redefined local exchanges in order to place intrastate toll under the FCC's jurisdiction and provided for a shorter life on investment in telephone plant.

Breakthroughs in communications satellite technology have decreased costs and resulted in lower rates on interstate toll charges to consumers. The thrust of the FCC actions and the result of Senate Bill 898 will be to preclude local exchange service from receiving any benefit from these technological improvements. In December 1981 a bill (H.R. 5158) was introduced in the House of Representatives which would amend the Federal Communications Act of 1934 to allow competition.

Indications from congressional action are that deregulation of interstate toll service is inevitable and will occur in the coming decade. The primary objective of the PSC during the transition from regulation to competition for toll service and for provision of terminal equipment and inside wiring should be to insure that basic local exchange service remains affordable to users of the local network. State regulatory commissions throughout the nation are in agreement that current actions by the FCC and pending legislation in Congress can have but one effect: a substantial and dramatic increase in the local rates regulated by these agencies. Thus the challenge to the PSC is to insure that essential local telephone service is available at an affordable price.

Chart C-1

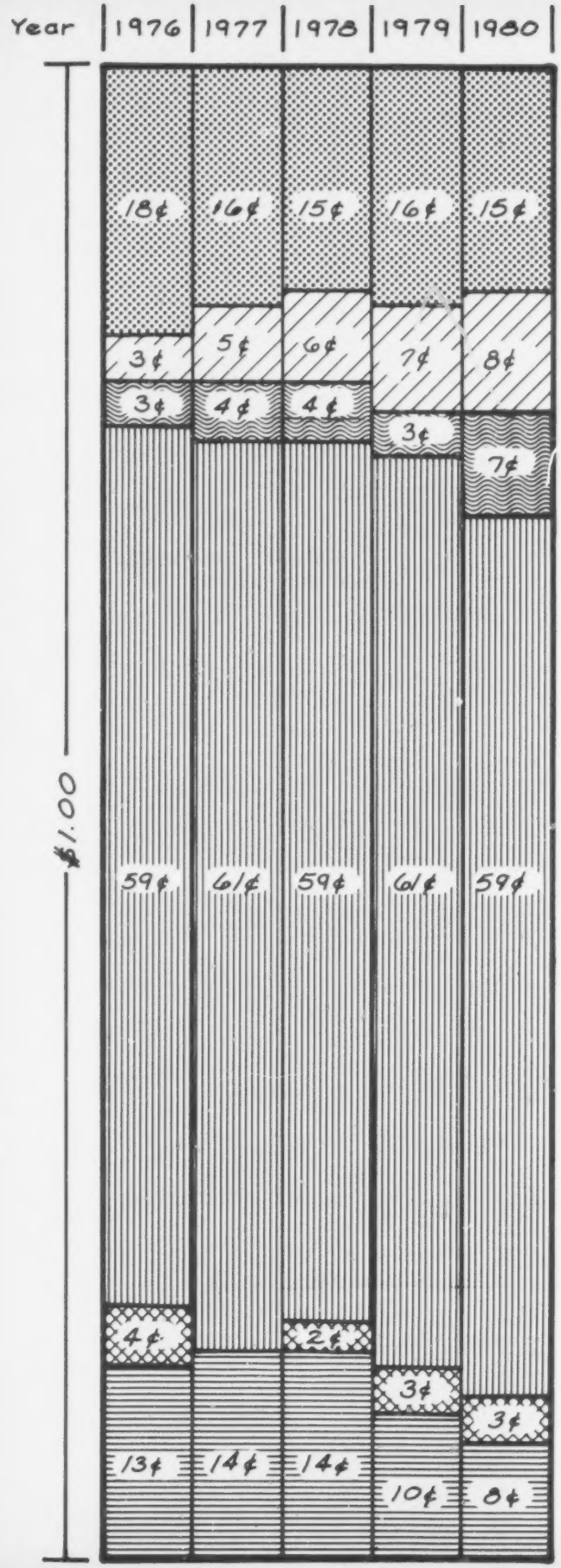


TELEPHONE COMPANIES
AND COOPERATIVES

LEGEND

- Depreciation And Amortization Expenses
- Income Taxes
- Other Taxes
- Other Operating Expenses
- Interest Expense
- Net Income

Chart C-2



RADIOTELEPHONE UTILITIES

LEGEND

- Depreciation And Amortization Expense
- Income Taxes
- Other Taxes
- Other Operating Expenses
- Interest Expense
- Net Income

Chart C-3

INVESTOR-OWNED TELEPHONE COMPANIES, COOPERATIVES AND RADIO COMMON CARRIERS

SUMMARY OF FINAL ORDERS ISSUED

	Biennium 7-1-71/ 6-30-73 $	Biennium 7-1-73/ 6-30-75 $	Biennium 7-1-75/ 6-30-77 $	Biennium 7-1-77/ 6-30-79 $	Biennium 7-1-79/ 6-30-81 $
Bonds	28,000,000		40,000,000	25,000,000	25,000,000
No. of Orders	2		1	1	2
Stocks	11,000,000	500,000	21,453,900	16,000,000	20,000,000
No. of Orders	2	1	5	4	2
Notes	15,224,200	27,599,764	51,826,850	79,075,350	24,369,000
No. of Orders	12	15	16	14	6
Total Securities	54,224,200	28,099,764	113,280,750	120,075,350	69,369,000
No. of Orders	16	16	22	19	10
Revision of Basic Rates Requested	25,895,284	22,262,561	87,971,349	71,838,817	173,587,520
Revision of Basic Rates Granted	15,327,979	13,630,021	37,986,712	32,772,353	82,342,390
No. of Orders	9	9	15	11	19
Construction	14,556,809	34,028,029	48,011,597	89,982,360	24,314,153
No. of Orders	12	16	14	20	8
Franchise					
No. of Orders	15	3		8	3
Miscellaneous					
No. of Orders	32	40	30	39	60
Total Number of Final Orders	84	84	81	97	100

The Water Industry

This industry is composed of the following types of utilities:

Investor-owned water utilities	-	46
Customer-owned water associations	-	37
Water districts	-	145
Total		228

The average number of customers served by the industry through December 1978 was 223,596 as compared to 259,321 through December 1980. The following table summarizes industry gross plant per average customer for the 12 months ended December 1978 and 1980:

	1978	1980
Investor-owned	$ 791	$ 876
Water associations	1,461	1,621
Water districts	1,162	1,166

The average revenue per customer for privately-owned utilities was $7.47 per month in 1978 and $8.83 per month in 1980; for water associations, $11.83 in 1978 and $13.18 in 1980; and for water districts, $9.75 in 1978 and $10.66 in 1980.

Utilities which purchase water are experiencing increases from wholesale suppliers. In 1978 the cost of water for investor-owned utilities was 24.4 cents per thousand

gallons as compared to 40.1 cents in 1980; for water associations, 56.6 cents in 1978 as compared to 66.4 cents in 1980; and for water districts, 42.3 cents in 1978 and 46.9 cents in 1980.

The industry is composed of one major investor-owned utility, several major water districts, and numerous small utilities. It is difficult for some small utilities to meet service needs and maintain reasonable rates.

Charts W-1 through W-3 show the costs covered by each dollar of revenue collected from the customers of the water industry for the 5 calendar years 1976 through 1980. All of the charts show that other operating expenses consume the largest part of each revenue dollar. This item is composed of the cost of purchased water, wages and fringe benefits, and maintenance materials. Further, as reflected by Chart W-2, water associations have experienced losses during this period. During and subsequent to this biennium, the associations have filed rate cases and have taken action to reduce line loss. Thus, their financial health should improve in the next biennium.

Most small water utilities keep inadequate financial, accounting and operating records. Because of the disproportionately large number of water utilities in this category as compared with the other four types of regulated industries, a substantial portion of the PSC's workload is

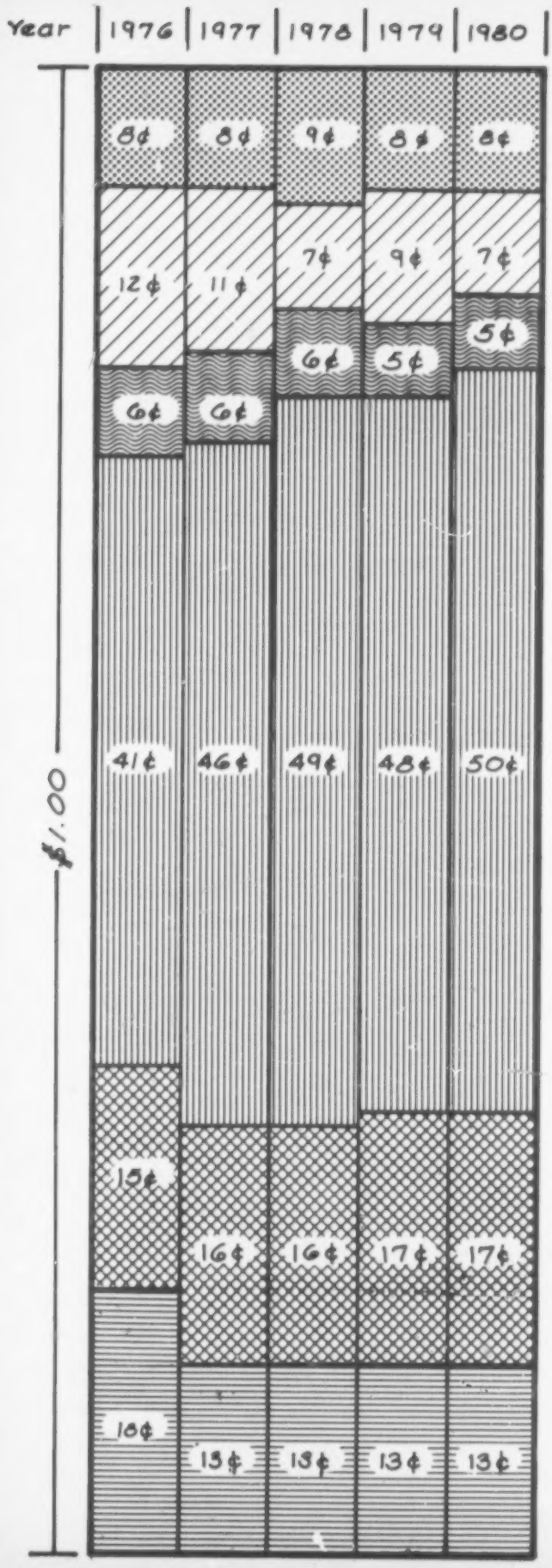
generated by this industry. As Charts W-4 and W-5 reflect the PSC had 78 rate applications from the water industry during the biennium. If the current trend continues this number will double in the next biennium.

The PSC processed approximately 80 complaints from water customers, most of which were resolved on an informal basis.

During the last biennium the PSC substantially completed work on a purchased water adjustment clause ("PWA"). The PWA allows a water utility to pass through to its customers increases in wholesale water cost without the expense of a full-scale rate proceeding. Since the close of the biennium, the PWA has been codified into a regulation and approved by the Administrative Regulation Review Subcommittee of the General Assembly.

During the next biennium the PSC expects to implement abbreviated filing requirements for small water utilities which should result in decreased consultant, attorney and other regulatory expenses. The PSC believes that a policy of encouraging consolidation of small, isolated systems with larger systems should be pursued in the water industry. During the next biennium, the PSC will actively search for opportunities to implement this policy.

Chart W-1

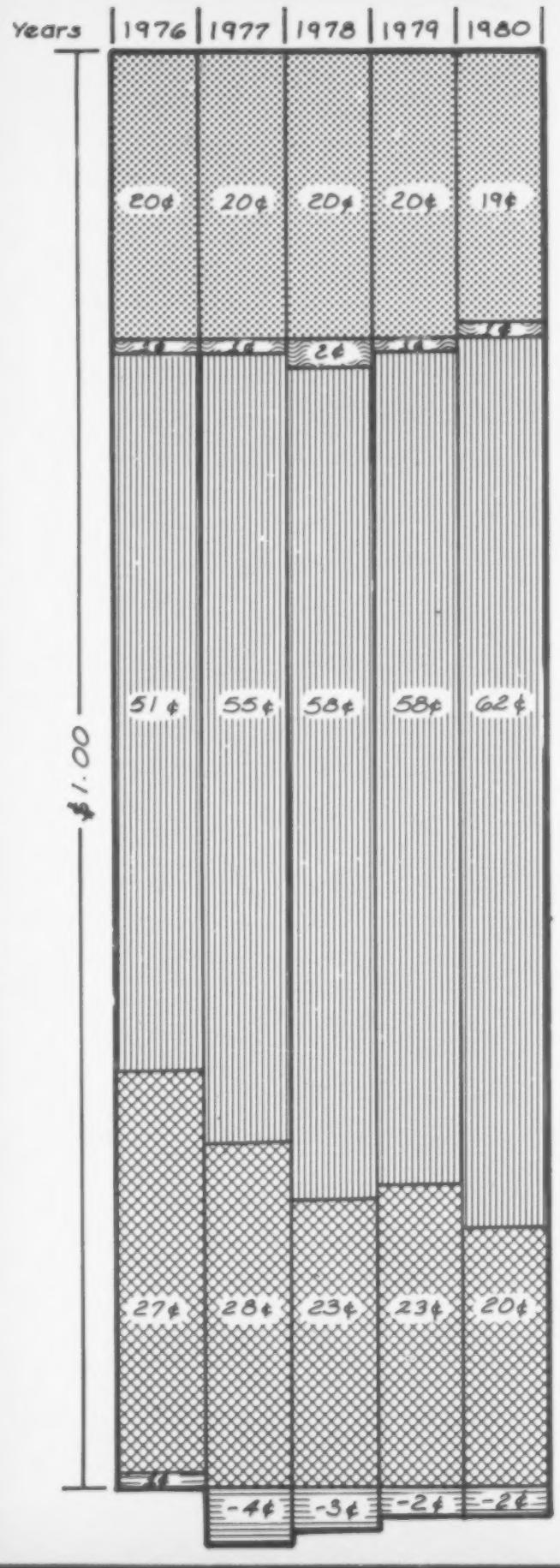


PRIVATELY OWNED WATER UTILITIES

LEGEND

- Depreciation And Amortization Expenses.
- Income Taxes
- Other Taxes
- Other Operating Expenses
- Interest Expense
- Net Income

Chart W-2

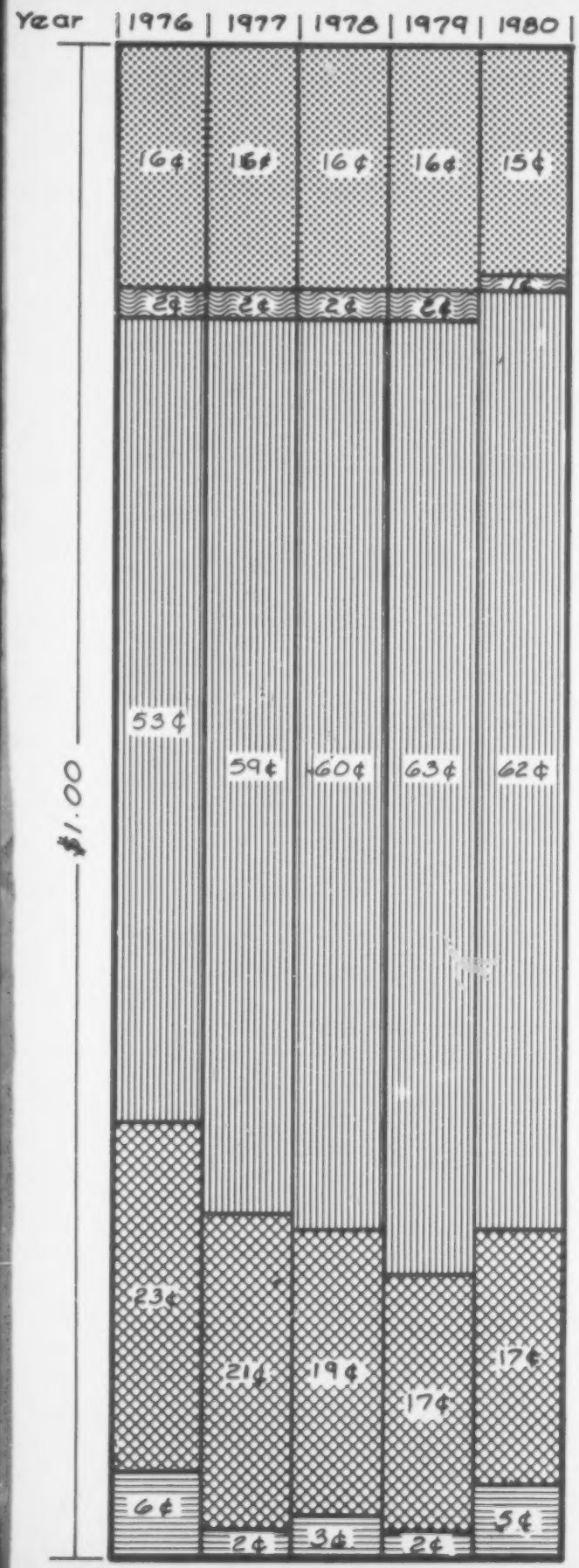


WATER ASSOCIATIONS

LEGEND

- Depreciation And Amortization Expense
- Taxes
- Other Operating Expenses
- Interest Expense
- Net Income

Chart W-3



WATER DISTRICTS

LEGEND

- Depreciation And Amortization Expenses
- Taxes
- Other Operating Expenses
- Interest Expense
- Net Income

Chart W-4

INVESTOR-OWNED WATER COMPANIES

SUMMARY OF FINAL ORDERS ISSUED

	Biennium 7-1-71/ 6-30-73	Biennium 7-1-73/ 6-30-75	Biennium 7-1-75/ 6-30-77	Biennium 7-1-77/ 6-30-79	Biennium 7-1-79/ 6-30-81
	$	$	$	$	$
Bonds		2,000,000		3,000,000	
No. of Orders		1		1	
Stocks	2,214,000				
No. of Orders	6				
Notes	89,300			2,419,000	2,137,520
No. of Orders	3			2	2
Total Securities	2,303,300	2,000,000		5,419,000	2,137,520
No. of Orders	9	1		3	2
Revision of Basic Rates Requested	27,809	2,895,561	1,186,313	2,523,738	2,379,366
Revision of Basic Rates Granted	27,809	1,580,327	222,413	1,290,497	1,217,457
No. of Orders	3	7	9	9	18
Construction	2,166,503	673,560		2,294,000	13,341,270
No. of Orders	7	2		1	4
Franchise					
No. of Orders	1	2			
Miscellaneous					
No. of Orders	28	11	20	11	16
Total Number of Final Orders	48	23	29	24	40

WATER ASSOCIATIONS AND WATER DISTRICTS

SUMMARY OF FINAL ORDERS ISSUED

	Biennium 7-1-71/ 6-30-73	Biennium 7-1-73/ 6-30-75	Biennium 7-1-75/ 6-30-77	Biennium 7-1-77/ 6-30-79	Biennium 7-1-79/ 6-30-81
	$	$	$	$	$
Bonds	4,383,800	8,395,000	9,160,000	12,773,000	26,716,000
No. of Orders	15	18	19	25	13
Notes	2,380,400	1,513,485	3,809,400	3,113,700	5,819,000
No. of Orders	17	9	13	9	11
Total Securities	6,674,200	9,908,485	12,969,400	15,886,700	32,535,000
No. of Orders	32	27	32	34	24
Revision of Basic Rates Requested	172,318	678,225	1,366,186	2,572,462	5,921,075
Revision of Basic Rates Granted	147,004	539,415	1,196,967	1,423,295	4,628,981
No. of Orders	13	28	34	37	58
Flow-Through Rates Requested					158,117
Flow-Through Rates Granted					154,056
No. of Orders					1
Construction	11,676,765	12,419,422	21,545,912	31,600,789	44,537,376
No. of Orders	25	27	32	38	28
Miscellaneous					
No. of Orders	45	28	32	43	48
Total Number of Final Orders	115	110	130	152	159

The Sewer Industry

The PSC's jurisdiction over this industry extends to the following classes of utilities:

Investor-owned utilities	-	193
Sewer associations	-	1
Sewer districts	-	26
Total		220

The average number of customers served by this industry was 79,293 in 1978 as compared to 102,522 in 1980. The average investment per customer increased from $828 in 1978 to $1,431 in 1980. The average monthly revenue per customer was $9.45 in 1978 and $11.37 in 1980.

The industry is composed of many small utilities, concentrated in Jefferson, Oldham and Fayette Counties. These utilities came into existence primarily as a result of development of residential subdivisions. They were initially established to meet government requirements, and the developers expected that eventually they would be absorbed by metropolitan governments. Current economic conditions and action at the federal level make it unlikely that these small utilities will be absorbed by larger metropolitan systems in the foreseeable future.

The deterioration of economic conditions and the resulting impact on the housing market have required the PSC

to expend substantial effort toward maintaining existing sewer service. In some communities, disillusioned developers have given their systems to others to operate or abandoned them without prior PSC approval. These economic and operating conditions can only result in higher rates for customers of this industry. In the current biennium the PSC has already seen sewer utility rates of $25 per month in isolated cases.

Chart S-1 shows the costs covered by each dollar of revenue collected from customers of the sewer industry during the calendar years 1976 through 1980. Other operating expenses consume the major portion of each dollar. This category includes cost of water, chemicals, wages and fringe benefits, and maintenance materials.

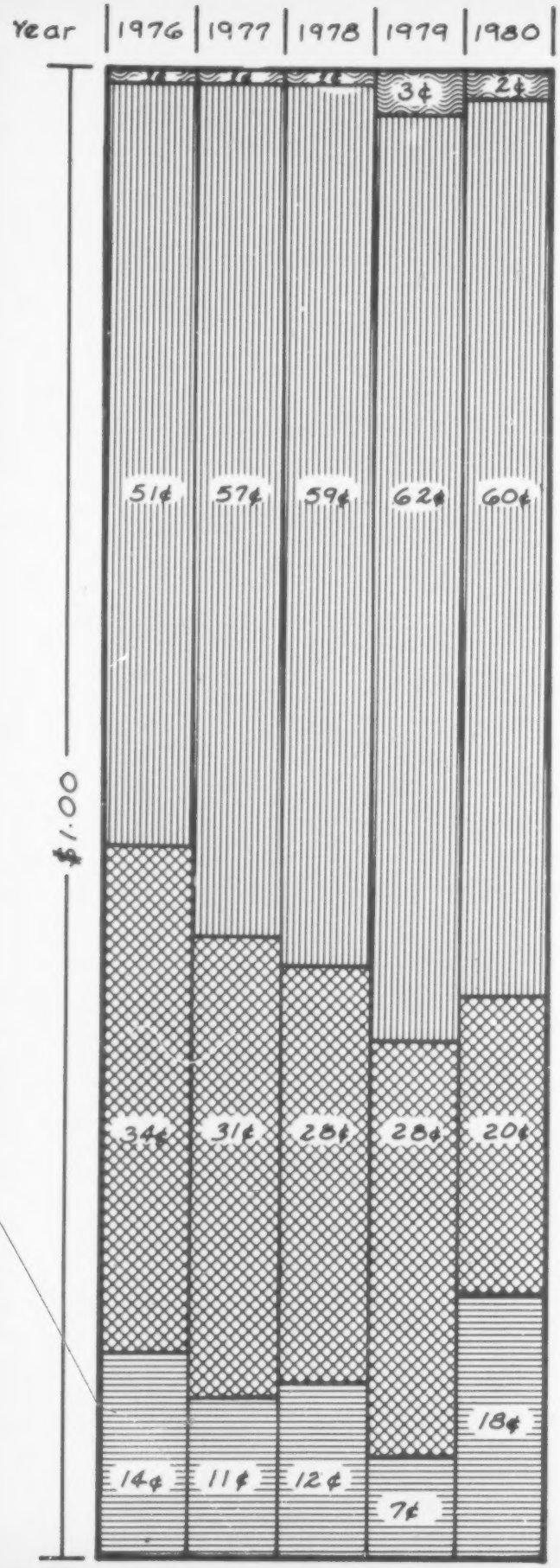
It should be noted that depreciation expenses were not included in this chart because a sewer utility's annual report to the PSC does not show depreciation on contributed and investor-provided plant separately. Since the PSC does not allow depreciation on contributed plant and the majority of this industry's plant is contributed, inclusion of depreciation would distort the financial picture of the industry.

The PSC rate caseload from the sewer industry has remained fairly constant over the last two bienniums. It issued 47 formal orders in rate cases along with 22 orders granting certificates of construction. Eighty formal com-

plaints were received, and all were resolved on an informal basis.

If customers are to pay reasonable rates, the cost of management of these individually-owned systems must be diminished. Therefore, the PSC in this biennium will encourage consolidation of these small companies. Further, the PSC expects to implement abbreviated filing requirements which it believes will reduce significantly the cost of attorney and consultant fees. In proceedings involving new sewer utilities, the PSC will consider the economic feasibility of each proposed utility. When feasibility is dependent upon subsidization by the developer, the PSC will seek to insure that potential customers are aware of the initial subsidized rate.

Chart S-1



SEWER UTILITIES

LEGEND

- Taxes
- Other Operating Expenses
- Interest And Other Deductions
- Net Income less Depreciation And Amortization

Chart S-2

SEWER COMPANIES AND SEWER DISTRICTS

SUMMARY OF FINAL ORDERS ISSUED

	Biennium 7-1-77/ 6-30-79	Biennium 7-1-79/ 6-30-81
	$	$
Notes	75,000	1,712,025
No. of Orders	1	11
Revision of Basic Rates Requested	1,319,816	4,697,823
Revision of Basic Rates Granted	630,314	3,884,091
No. of Orders	42	47
Construction	7,142,384	7,048,320
No. of Orders	37	22
Miscellaneous		
No. of Orders	33	50
Total Number of Final Orders	113	130